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PB-289 769

Dispersion of Sewage Sludge Discharged into New York Bight. Physical Oceanographic Data and Laboratory Analyses - 1975

(U.S.) Corvallis Environmental Research Lab, OR

Sep 78

United States
Environmental Protection
Agency

Environmental Research
Laboratory
Corvallis OR 97330

EPA-600/3-78-086b
September 1978

Research and Development

PB 289769

EPA

DISPERSION OF SEWAGE SLUDGE DISCHARGED INTO NEW YORK BIGHT

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TECHNICAL REPORT DATA
(Please read Instructions on the reverse before completing)

1. REPORT NO.
EPA-600/3-78-086b

2.

3. RECIPIENT'S ACCESSION NO.
PB289769

4. TITLE AND SUBTITLE
Dispersion of Sewage Sludge Discharged into New York Bight. Physical Oceanographic Data and Laboratory Analyses - 1975.

5. REPORT DATE
September 1978

6. PERFORMING ORGANIZATION CODE

7. AUTHOR(S)
A. M. Teeter, R. J. Callaway, G. R. Ditsworth, D. W. Denbo, and D. W. Browne

8. PERFORMING ORGANIZATION REPORT NO.

9. PERFORMING ORGANIZATION NAME AND ADDRESS
SAME

10. PROGRAM ELEMENT NO.
1BA608

11. CONTRACT/GRANT NO.

12. SPONSORING AGENCY NAME AND ADDRESS
U. S. Environmental Protection Agency
Office of Research and Development
Corvallis Environmental Research Laboratory
200 S. W. 35th Street, Corvallis, Oregon 97330

13. TYPE OF REPORT AND PERIOD COVERED
inhouse

14. SPONSORING AGENCY CODE
EPA-ORD EPA/600/02

15. SUPPLEMENTARY NOTES

16. ABSTRACT

This volume contains data on the dispersion of sewage sludge subsequent to its disposal at a site near the apex of the New York Bight. Cruises were made in May, July, and October, 1975. An optical tracer method was used to measure the water column distribution of waste material for two to four hours after discharge. Direct measurements of the concentration of suspended material were made. Ambient temperature-salinity-density profiles were taken. Currents were measured by moored and profiling instruments and by drogue tracking. Laboratory analyses on the settling characteristics, densities, and optical properties of sewage sludges from the New York area are presented.

17. KEY WORDS AND DOCUMENT ANALYSIS

a. DESCRIPTORS	b. IDENTIFIERS/OPEN ENDED TERMS	c. COSATI Field/Group
sewage sludge disposal oceanic dispersion	New York Bight, STD, currents	

18. DISTRIBUTION STATEMENT
Release to public

19. SECURITY CLASS *(This Report)*
Unclassified

20. SECURITY CLASS *(This page)*
Unclassified

21. NO. OF PAGES
212

22. PRICE
A10 - A01

EPA Form 2220-1 (9-73)

☆ U. S. GOVERNMENT PRINTING OFFICE: 1978—797-920/248 REGION 10

EPA-600/3-78-086b
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Physical Oceanographic Data and Laboratory Analyses-1975

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FOREWORD

Effective regulatory and enforcement actions by the Environmental Protection Agency would be virtually impossible without sound scientific data on pollutants and their impact on environmental stability and human health. Responsibility for building this data base has been assigned to EPA's Office of Research and Development and its 15 major field installations, one of which is the Corvallis Environmental Research Laboratory (CERL).

The primary mission of the Corvallis Laboratory is research on the effects of environmental pollutants on terrestrial, freshwater, and marine ecosystems; the behavior, effects and control of pollutants in lake systems; and the development of predictive models on the movement of pollutants in the biosphere.

This report describes work performed in New York Bight as one aspect of an EPA study relating to the discharge of wastes from the New York-New Jersey metropolitan area. It is one of a series of four data reports relating specifically to digested sewage sludge discharged from vessels operated by the City of New York.

A. F. Bartsch
Director, CERL

ABSTRACT

This volume contains data on the dispersion of sewage sludge subsequent to its disposal at a site near the Appex of New York Bight. Cruises were made in May, July and October, 1975. An optical tracer method was used to measure the water column distribution of waste material for 2 to 4 hours after discharge. Direct measurements of the concentration of suspended material were made. Ambient temperature-salinity-density profiles were taken. Currents were measured by moored and profiling instruments and by drogue tracking. Laboratory analyses on the settling characteristics, densities, and optical properties of sewage sludges from the New York City area are presented.

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ACKNOWLEDGMENTS

We would like to thank Mr. E. O. Wagner and Capt. E. D. Hansen of the New York City Department of Water Resources for arranging sludge vessel sampling and vessel operations in the field.

Personnel from the Surveillance and Analysis Group under Mr. Richard Dewling in U.S. Environmental Protection Agency's Edison, New Jersey, Laboratory were helpful in many aspects of this work.

Dr. Jack Pearce of the Sandy Hook Marine Laboratory (NOAA) supplied us with storage, dock space and other amenities without which a difficult operation would have been more so.

The captains and crews of the R/V *Atlantic Twin* and R/V *Sub Sig* did much to help make the field work successful.

SECTION 1

INTRODUCTION

This is the final volume of four data reports covering field and laboratory investigations concerning the dispersion of sewage sludge discharged at the U. S. Environmental Protection Agency (EPA)-approved dump site in New York Bight. An earlier report (Teeter et al., 1975) included data collected on the December 1974 cruise as well as descriptions of instrumentation and procedures. Preliminary analysis of the data has been given by Callaway et al. (1976). The present volume includes data from the May, July and October (1975) cruises and any instrumentation or procedures not covered in the earlier report. The field data presented here include salinity-temperature-density-transmittance profiles made in background conditions and after sludge discharges. Measurements of currents and two dimensional sections through waste clouds were made. Research vessel positions were continuously monitored to ±7.5 meters as described later. Laboratory analyses of the bulk density, solids concentration, solids density, settling velocity, and transmittance characteristics of sludge sampled prior to discharge are also presented.

The research vessels *Atlantic Twin* and *Sub Sig* were chartered by EPA for use in the project. Cruise participants were R. J. Callaway, field party chief, G. R. Ditsworth and A. M. Teeter.

Roughly 4.3 million wet tons (Hansler, 1976) of sewage sludge were discharged into New York Bight about 6.7 km 127° true from Ambrose light during 1975. This sludge is a byproduct or residue from municipal wastewater treatment plants scattered throughout the New York-New Jersey metropolitan area. It consists of 95+ percent water by weight and has a bulk density less than that of the receiving seawater. The sludge is discharged through bottom openings from specially designed tankships. Normally, the sludge diposal vessels are required to discharge while underway and for a minimum duration of time. When the ports or valves are opened the sludge material flows out under the force of gravity. The low density of the waste tends to counteract the initial momentum of the issuing jets and limits downward penetration. After a period of dynamic mixing, advection and diffusion processes take over the dispersion of the waste cloud or plume (terms used interchangeably here). The solid component of the waste consists of widely varying individual particles which flocculate to a certain extent in seawater. These particles may either be suspended or settle at a rate dependent on their settling velocity, the vertical distribution of currents, and vertical turbulence.

The field experiments carried out during the May, July and October cruises were similar to those carried out in December 1974 but some variation always occurred. No two experiments were alike; ambient conditions were always changing and discharge procedures were modified. The types of discharges observed included: (1) stationary discharge at maximum discharge rate, (2) stationary discharge at the normal discharge rate, (3) slow-speed underway discharge at maximum discharge rate, (4) slow-speed underway discharge at normal discharge rate, (5) normal underway at maximum discharge rate, and (6) normal underway at normal discharge rate. Many of the instrumentation and procedures used are discussed in the other data reports (Ditsworth et al., 1975; Teeter et al., 1975; Browne and Callaway, 1975) and will not be repeated here. New items which will be described include a precision positioning system, water sampling and analytical methods for total suspended matter (TSM) determination, and a sampling scheme for sectioning a waste cloud in two dimensions. Generally, direct measurements of TSM and an optical tracer method were used to study the behavior of the solid portion of the waste until its location was in doubt or until successive profiles indicated no change in their distribution. Background values and ambient conditions were also determined.

The format used in this volume is to present a day-by-day summary of the field experiments, followed by sections on instrumentation and calibration, field procedures, and data processing. The data are presented in the appendices by subject grouping and organized sequentially within the appendices. Appendix A contains position plots of sampling locations. Appendix B contains vertical profiles of salinity, temperature, density, transmittance and extinction coefficient alpha (Alpha = $-\frac{1}{d}\ln T_r$, where d is the path length and Tr is transmittance). Appendix C contains two dimensional alpha contour plots made from sawtooth vertical tows through sections of the waste plume. A sawtooth vertical tow is made by continuously raising and lowering the Salinity-Temperature-Depth (STD) probe as the research vessel passed through the waste plume. The data from the moored current meter implanted during the cruises and measuring currents at 2.5 m depth are given in Appendix D. There time-series currents and predicted tides (Sandy Hook) are plotted for the duration of the field experiments for which there is data coverage. For the July and October cruises, a plot covering the entire current meter deployment is also included. Progressive vector diagrams follow the corresponding time-series plot. Current meter profiles taken from the unmoored research vessel, corrected for local magnetic variation and vessel drift, are tabulated in Appendix E. Samplings for TSM were made primarily to enable a field correlation between alpha and suspended solids concentrations. The data consist of depth, temperature, salinity, transmittance, computed density and alpha from the STD, and the TSM values determined by filtration. Those data are tabulated in Appendix F. A summary of the sludge characteristics is given in Table G-1 of Appendix G. The characteristics included are bulk density, solids concentration, solids density, and the laboratory correlations between alpha and solids concentrations. Also found in Appendix G are the settling velocity curves generated by laboratory settling-tube tests (procedures in Browne and Callaway, 1975). Test code designations for the various sludge samples are given in Table G-1. Duplicate settling tests were done on some sludges varying initial concentration and/or settling height. The characteristics of sludge analyzed after the December 1974 cruise are included in Table G-1 for comparison. All times referred to in this volume are Eastern Daylight Time.

SECTION 2

MAY 1975 CRUISE

Stratification of the water column at the disposal site was not developed during the first three days of the cruise but did develop on the fourth day. Vertical profiles were made during the experiments on the first three days. On the last day, sawtooth vertical profiles were made; first, down the wake immediately after the discharge and then at right angles to it. Surface drogues were deployed for use as reference points to aid in tracking the waste material. Daily accounts follow.

MAY 5, 1975

The tankship *Owls Head* was intercepted in the dumping ground. It discharged while moving slowly into the wind. The vessel carried about 1700 m^3 of sewage sludge and discharged through all 12 bottom openings in 12 minutes. Water clarity was very good (transmissivity about 96%). Multiple vertical profiles of salinity, temperature and transmittance were made for about 2 1/2 hours. Wind was NE at about 20 knots during the experiment. Vertical profiles appear on pages 29 through 36.

MAY 6, 1975

Wind was 5-10 knots from the west; water clarity was very good (transmissivity about 96%). The tankship *North River* discharged 400 m^3 through a single port while stopped dead in the water. The boundary of the waste was not distinctly discernible after the discharge. After a couple of vertical profiles the position of the waste cloud became doubtful and horizontal tows were made in an unsuccessful attempt to locate it. Those tows will not be presented. The density gradient was compiled from

$$(\sigma_{ta} - \sigma_{to})/(1000 + \sigma_{to})\Delta Z$$

Where σ_{ta} is the sigma-t density at depth a and σ_{to} is the density ΔZ meters above a. For this day there was a weak gradient over the total water column at 6×10^{-6} m^{-1} (= 6E-6 m^{-1}). The first vertical profile indicated the presence of the sludge to a depth of 15 meters. Subsequent profiles showed greatly decreased total concentration of sludge. The positions of sampling points are plotted on page 17. Vertical profiles are on pages 37 to 45. Currents were measured during the experiment by profiling (page 160) and by time series measurements (pages 147 and 148).

MAY 8, 1975

The *North River* stopped near the center of the permit area and discharged 400 m^3 (one tank) through a single port. Water clarity was good (transmissivity about 95%) on this clear day. The *North River* then moved away from this site to discharge the remainder of her load of sewage sludge (about 2490 m^3). Vertical profiling commenced. Twelve minutes after the discharge, sludge was present at 16 meters depth; at seventeen minutes after the discharge, sludge was present at 19 meters depth. Winds were light and the water column density gently increasing from a σ_t of 25.1 at the surface to 25.25 at 22 m. After an hour and a half the plume was not distinct or clearly visible. Sampling was then switched to the plume from the second dump that the *North River* had made with the remainder of her sludge load. Sampling continued for about an hour there. The positions of the sampling stations shown on page 18 indicate the change in sampling location. Vertical profiles are on pages 46 to 63. A current profile is on page 161.

MAY 9, 1975

Skies were hazy with low clouds; wind was south at about 5 knots. Water clarity was good (transmissivity 93-94%). The density gradient was steep in the uppermost 7 meters (1.5E-4 m^{-1}) and well mixed below this depth. The *North River* discharged while going dead slow ahead ($\sim$ 3 knots). The R/V *Atlantic Twin* pulled into the wake about two minutes after the discharge began and made a sawtooth vertical tow down the centerline at a speed of about 2 knots. The actual time used for this sampling was 10 minutes, but the time relative to the plume was from $T = 2$ minutes to $T = 6$ minutes, or only 4 minutes. Drogues were deployed at the beginning and end of the discharge. Three subsequent sawtooth vertical tows were made at right angles to the plume. The last was 109 minutes after the discharge. The positions of background and other vertical profiles and of the paths followed during the tows are given on page 19. Times are also noted there. Vertical profiles are on pages 64 through 65. Alpha contour plots from the tows are on pages 131 through 134. A current profile is on page 162. Suspended matter data are on page 167.

SECTION 3

JULY 1975 CRUISE

Water column features during this cruise were much more stratified than during previous cruises. This was especially true of temperature which ranged to well over 23°C at the surface to under 13°C at the bottom.

All but one experiment undertaken were of stationary discharges. This allowed the plume to be followed and measurements taken over a longer time interval. Pairs of drogues were set at two depths, 2.5 and 15 meters, and deployed shortly after the discharges. In addition to providing a reference to the position of the waste cloud, their positions were recorded occasionally as a direct measure of the currents at those two depths. In the position plots, the 2.5- and 15-meter drogues are represented by up and down arrows, repectively. All times noted throughout this volume refer to Eastern Daylight Time. A moored current meter was deployed at the beginning of the cruise. A time series plot and progressive vector diagram for the entire current meter record are on pages 149 and 150. The current meter was accidentally damaged by a sludge tankship and thus no records exist for the experiments on July 18 and 19.

Dissolved oxygen (DO) was measured during the July cruise by Winkler titration and polarographic instrumentation methods. DO was measured in background samples and samples with high concentration of sewage sludge. The results of these measurements indicate no great depression of DO in the suspended sludge field. In general, the background dissolved oxygen was supersaturated near the surface. It should be noted that high suspended solids reduced the precision of the titration method, while the polarographic method probably suffered from the interference of oily films.

JULY, 15, 1975

Before the experiment got underway, rain fell; wind was SSW 10-15 knots; and seas were from the south with 1 m height. Later, winds diminished to less than 10 knots and seas became less than 0.6 m. The upper 5 meters of the water column was mixed. A strong pycnocline or a double pycnoclines was present below 5 m. The maximum gradient was often 5E-4 m^{-1}. The Owls Head stopped in the water and discharged 1810 m^3 from 1017 to 1029 EDT. Drogues were deployed at 1030. Vertical profiles were made during the next 1 1/3 hours. These profiles appear on pages 66 through 70. At 1215 EDT the Bowery Bay began discharging 1715 m^3 of sewage sludge while underway in the normal manner. The discharge took 18 minutes. Vertical samples were collected here for about 2 1/4 hours. These profiles are on pages 71 through 75. The sampling position plot is on page 20. Sampling was normally done near the surface drogues. Times series currents and a progressive vector diagram for the time period covered by these experiments are on pages 151 and 152. Information on suspended matter is on page 168.

JULY 16, 1975

Skies were overcast with fog; wind was south at 3 knots; seas were less than 0.3 m. A thermocline and pycnocline were evident between 6 and 12 meters. The average density gradient in this area was 4E-4 m^{-1}. The Owls Head discharged 1810 m^3 of sewage sludge while stopped. Discharge was from 1019 to 1035 EDT. Drogues were immediately deployed. Vertical profiles were made during the next 3 2/3 hours. As the experiment proceeded the temperature and density profiles became more monotonical from the surface to the bottom. The position plot with sampling and drogue locations is on page 21. Vertical profiles are on pages 76 through 84. Current meter time-series and progressive vector plots are on pages 153 and 154. A current profile is on page 163. Data on suspended material are on page 169.

A sample-of-opportunity was taken at 1406 EDT six minutes after the Susan Franck began discharging. She discharged in the normal manner: underway and for about 25 minutes. This vertical profile is on page 85.

JULY 18, 1975

Winds were south at 7 knots; seas were 0.5 m; and skies were cloudy with haze. Water clarity was fair (transmissivity 88-89%). The density profile had a maximum gradient (5.5 E-4 m^{-1}) at 6 to 8 m depth. The Owls Head stopped and discharged 1810 m^3 from 1018 to 1033 EDT. Drogues were deployed at 1030 EDT in the resulting patch. At 1134 EDT the deep (15 m) drogues were retrieved and redeployed near the surface (2.5 m) drogues at 1145 EDT. Vertical sampling continued for about 4 hours after the discharge. Positions of the sampling stations and the drogues are plotted with times on page 22. Vertical profiles are on pages 86 through 99. A current profile is on page 164 and suspended matter data on page 170.

JULY 19, 1975

Weather was clear, winds SSW at 12-15 knots, and seas 0.3 - 0.6 m. Water clarity was poor (transmissivity 82-85%). Density increased from the surface to 8 m at about 5 E-4 m^{-1}. Temperature profile showed the greatest gradient at 4 to 8 meters. From 1015 to 1026 EDT the Newtown Creek discharged 2890 m^3 of sewage sludge while stopped. Drogues were deployed at 1025 EDT. Vertical profiles were made during the next 3 hours. Sampling and drogue positions are given in the position plot on page 23. Vertical profiles appear on pages 100 through 111. Information on suspended matter is on page 171.

SECTION 4

OCTOBER 1975 CRUISE

Temperature did not vary greatly in the water column. Sometimes slight inverse temperature gradients appeared. Salinity stratification created moderate density stratification. Underway discharges were investigated on this cruise and the sawtooth vertical tow again was employed (weather permitting). Drogues were usually deployed but their subsequent movements were not followed because of a lack of time and the distances involved. A current meter was moored near the center of the disposal site during most of the cruise. The time series and progressive vector plots from this record are on pages 155 and 156, respectively.

OCTOBER 14, 1975

Skies were partly cloudy; winds were calm; seas were less than 0.3 m. Water clarity was very good (transmissivity about 99-100%). The density profile showed a slight gradient with depth but no pycnocline was present. The Owls Head stopped and discharged 1810 m^3 of sewage sludge from 1006 to 1026 EDT. Drogues were deployed. A vertical profile was made 10 minutes after the discharge began. During the next 4 hours, six sawtooth vertical tows were completed. The first started at what appeared to be one edge and went down the length of the spreading waste plume. An S-turn was made at the other edge. The positions of vertical profiles and paths of sawtooth vertical tows are given on page 24. Vertical profiles are on page 112 through 114. Alpha contour plots from sawtooth vertical tows are on pages 135 through 140. Data for suspended material are on page 172.

OCTOBER 15, 1975

Weather was clear, winds were SW 3-5 knots. A pycnocline was present from 1 to 3 meters (gradient of about 4E-4 m^{-1}). Water clarity was fair (transmissivity about 88%). Three underway discharge experiments were attempted, the first from 0958 to 1013 EDT. The Owls Head dumped 1530 m^3 while underway at slow speed. A sawtooth vertical tow was made for 23 minutes after the discharge down the wake centerline. The record showed very little sludge material and was somewhat irratic. Therefore, the contour plot and path followed will not be presented.

The Newtown Creek discharged 2890 m^3 while underway at slow speed from 1037 to 1102 EDT. Two tows were made, both down the centerline of the wake, over a 54 minute time span.

Later, the North River discharged 2890 m^3 while underway at slow speed. Discharge took place between 1703 and 1710 EDT. Two vertical sawtooth tows were made up to about 35 minutes after the discharge began.

Positions of the vertical profiles and the paths followed during the tows are on page 25. The vertical background profiles are on pages 115 and 116. Alpha contour plots from sawtooth vertical tows are on pages 141 through 144. A current meter profile is on page 165. Suspended material data are on page 173.

OCTOBER 16, 1975

Skies were overcast; wind was NW 12-18 knots; and seas had 0.5 - 1.3 m height. Weather was unfavorable for towing so vertical profiles were made. The water column was stratified into three layers. Water clarity was good (transmissivity about 93%). The North River discharged while underway at normal speed. A fast discharge rate was used. The discharge was from 1022 to 1032 EDT and had a volume of 2890 m^3. Vertical profiles were made for about 4 hours after the discharge. No drogues were deployed for fear they would be lost. Sampling was done near the center of the visible plume. Sampling locations are plotted on page 26. Background sampling began at the 0903 EDT location plotted although the background vertical profile was at 0950 EDT. Vertical profiles are on pages 117 through 128. Time series and progressive vector plots of the currents during this experiment are on pages 157 and 158. Suspended material analyses are on page 174.

OCTOBER 17, 1975

Skies were overcast; wind was NE 10-12 knots; and seas were 0.6 m. A strong pycnocline was present between 7 and 11 m depth. Water clarity was fair (transmissivity about 89%). The Newtown Creek discharged while underway at normal speed from 1053 to 1102 EDT. Discharge volume was 2890 m^3. A single sawtooth vertical tow was made for about 35 minutes down the centerline of the wake patch. The path followed during the tow and the positions of samplings are plotted on page 27. The vertical background profile is on page 129. The contour plot of alpha from the sawtooth vertical tow is on page 145. Data on suspended material are on page 175.

SECTION 5

INSTRUMENTATION AND CALIBRATION

MINI-RANGER III

Motorola's Mini-Ranger III is a short range positioning system. It operates at microwave frequency (5.6 GHz) by measuring the distance between the shipboard receiver-transmitter and shore reference stations via interrogation-to-reply time delay. The ranges are recorded in real time with true positions calculated later. Positioning data were taken, along with CSTD data, during sawtooth vertical tows. It was used to accurately determine vessel drift, to fix the positions of freely floating drogues with time, and to locate sampling stations.

The onboard system consists of a receiver-transmitter, range console, and digital printer. Ashore, three reference stations were set up at known locations along the northern New Jersey coast. A sufficient height is required so that the reference stations and shipboard receiver-transmitter are almost within line-of-sight. On command from the range console, the receiver-transmitter selectively interrogates two reference stations. The time delay until reception of each coded reply is converted to a corresponding distance. Range distances are displayed digitally on the range console and, when required, automatically recorded along with time on the digital printer. Normally the range console internally averages five rapid replies in 100 msec before updating the range display. Options allowed averaging up to 75 replies before range update to improve output stability.

The probable accuracy specified by the manufacturer for the individual ranges is ±3 meters. The reference stations were used in a configuration enclosing an angle of about 35° at the sludge disposal site. The theoretical probable error or uncertainty is therefore ±7.5 m. Calibration of the individual reference stations was done on a relatively short (122 m) measured range before each cruise. The signal strength loss anticipated at the dump site was simulated by inserting attenuators in the antenna of the receiver-transmitter. During the cruises, field checks of the equipment were made by periodically ranging all three shore reference stations in quick succession. The three resulting lines of position form a triangle. The radius of the inscribed circle is then a measure of the uncertainty of the fix and a quick check to see that the system is working properly. The mean radius of uncertainty was found to be 11.5 meters ($\sigma = 7.3$ m). Part of this can be attributed to the time delay involved in triple ranging since three simultaneous ranges cannot be taken. Even with the research vessel stopped in the water, a ten second delay would translate into a 0.5 to 4.0 m movement at the drift velocities encountered.

INTEROCEANS CSTD-TR MODEL 513

This equipment was used to profile salinity, temperature, and transmittance versus depth. A more complete description is given in Teeter et al. (1975). The purpose here is to present field calibration data taken during the May, July and October cruises. Field calibration checks consist of independent salinity and temperature measurements made from hydro-casts simultaneous to CSTD profiles. The salinities were determined from samples in the laboratory using a Plessey 6230-N salinometer. The average temperature from a pair of reversing thermometers was used. Seventeen determinations of salinity and temperature were made during the May and October cruise. The samplings could not always be taken in a well mixed portion of the water column. Ideal conditions were not always present.

The mean differences between the values obtained from the hydro-casts and the corresponding CSTD values (after processing) were 0.004 and 0.010 for temperature and salinity, respectively. The standard deviations of the differences between hydro-cast and CSTD were 0.025 and 0.032 for temperature and salinity, respectively.

AANDERAA CURRENT METER (RCM4)

On the October 1975 cruise an Aanderaa current meter model RCM4 replaced the Bendix (Marine Advisers) model Q-15 on the mooring maintained at the dump site during the cruise. The mooring itself was unchanged and was described in Teeter et al. (1975). The instrument was suspended to measure currents at 2.5 meters depth.

The Aanderaa RCM-4 has an omni-directional rotor-type current speed sensor and a one-meter-long vane and magnetic compass for direction determination. The velocity measurements are integrated over the recording interval (the time interval between recorded samplings) while the direction measurements are instantaneous. Data are recorded in binary form on magnetic tape. A recording interval of 10 minutes was used.

Calibration procedures are given in Pillsbury et al., 1974; they were performed at the Oregon State University Oceanography Department.

WATER SAMPLES FOR SUSPENDED MATERIAL

During the May, July and October cruises water samples for suspended solids determination were taken by pumping water up through a hose rather than by trapping water in a sampler or water bottle. The sample inlet was attached to the CSTD probe to allow measurements of salinity, temperature, transmittance and depth to be taken at the same time and place. This increased the correlation coefficient between field measurements of transmittance (alpha) and suspended solids.

The components of the pump system included a check valve at the sampling end; two sections of 1.9 cm I.D. rubber-lined hose (total length 30.5 m); and, on deck, a 1 h.p. pump with epoxy impeller.

SECTION 6

FIELD PROCEDURES

The field methods of sampling used to make vertical CSTD profiles and current profiles were covered in Teeter et al. (1975). New or additional methods will be covered here.

WATER SAMPLE COLLECTION

The pump and hose arrangement previously described was used to collect water samples for TSM analysis. With the inlet affixed to the CSTD, samples were drawn from select depths. With the suction end (and instrumentation) near the surface, the pump was started and the hose flushed several times. Digital CSTD-Tr readings were taken and then, after a 30 second delay to flush the hose, the entire pumped stream was diverted to a sample container. The pump remained on continuously as subsequent samples were made at about 5 m vertical intervals. This method replaced the previous procedure of taking water samples by water-bottle casts. It was adopted to more nearly insure that water samples and in situ measurements were from the same water parcel.

GRAVIMETRIC ANALYSES OF SUSPENDED MATERIAL

Prior to the July 1975 cruises all samples for gravimetric analysis were preserved with Lugol's solution and shipped to Corvallis, Oregon, for analysis as work schedules permitted. During the July and October 1975 cruises all samples collected were left unpreserved and filtered on board the research vessel. Filters (Millipore HA) were numbered, preweighed and stored in individual plastic petri dishes before leaving Corvallis. In use, the filters were placed in the filter holders in stacked pairs, the top filter serving as the test filter and the bottom one as a control to assess inherent weight changes. Two replicas of each sample were filtered, the results of which were averaged to obtain the reported value. After filtration was completed the filters were rinsed with 10 to 15 milliliters of distilled water to remove soluble salts. The filters were returned to their respective petri dishes and returned to Corvallis for drying and weighing.

Additionally, duplicates of 48 samples collected during these two cruises were preserved with Lugol's solution and shipped to Corvallis for analysis. Overall, the preserved samples averaged 1.8 percent more TSM per liter (dry weight basis) than the unpreserved samples. Of the 48 duplicates, 21 preserved samples had a smaller concentration than the unpreserved and 27 samples had a greater concentration. The concentration of TSM in the preserved samples ranged from 66 to 127 percent of that in the unpreserved samples. Based on the results of this test it was our judgment that preservation with

Lugol's solution and storage of up to a few weeks did not significantly affect the concentration of TSM in the water samples.

Samples collected during the May 1975 cruise were preserved with Lugol's solution and shipped to Corvallis, Oregon, for analysis. About three-fourths of these samples were analyzed using a filter made of PVC (Millipore BD) before it was discovered that these filters were severely leached as a function of their exposure time to seawater. Use of these filters was immediately abandoned and the remainder of the samples were filtered, through Millapore HA filters. Stacked, paired filters were used; the top filter serving as the test filter and the bottom one serving as a control to assess any inherent filter weight changes. Only the data from these analyses are reported. The information obtained from the use of the PVC filters is considered unreliable.

SAWTOOTH VERTICAL TOWS

This sampling method was used to section in two dimensions across waste plumes. CSTD-Tr measurements were made with the probe towed in a horizontal orientation, sensor end first. Depressor and stabilizing foils were attached to the instrument case. The probe was raised and lowered vertically by winch at about 0.25 m sec^{-1} while being towed at about 1 m sec^{-1}. Transmittance and depth were monitored and used as the criteria for selecting the depth of the lower excursion of the probe. Boat position was closely monitored. Both the CSTD and Mini-Ranger data were collected and later combined during data processing.

SECTION 7

DATA PROCESSING

Many of the data processing procedures used were described in Teeter et al. (1975). These procedures include processing of field data from the CSTD and Q-15 current meter and laboratory data from settling tests. They will not be covered here. New to the May, July and October cruises was the need for the reduction of range positioning data, current meter data and sawtooth vertical CSTD tows.

RANGE POSITIONING DATA

Positioning information was taken by the Mini-Ranger in the form of time and ranges to reference stations printed digitally on pager tape. The conversion of these ranges to latitude and longitude coordinates first involves the solution of the oblique triangles whose common base is formed by two reference stations. Distances can then be converted to differences in latitude and longitude between the vessel and a reference station, and the coordinates of the vessel calculated. A computer program was written to perform these operations. The output from the program contains a listing of the station locations and a plot of these positions on a Mercator grid. Underway sampling stations were represented by connecting a series of fixes taken every one or two minutes (depending on the length of the tow) with a line.

CURRENT METER DATA

The data collected with the Bendix Q-15 current meter were manually lifted from the analog record at five minute intervals during the dumping experiments and ten minute intervals elsewhere. The record from the Aanderaa current meter was decoded by the School of Oceanography, Oregon State University. In both cases, values were converted to direction relative to true north and to velocity cm sec^{-1}. A time series plot of current speed and direction was made. Tide height was not measured but was plotted by making a cosine fit through the predicted tides at Sandy Hook, N.J. (NOAA, 1974). A progressive vector plot was made by the cumulative summation of vectors equal to the individual current values times the recording interval.

TOWS

The raw data from the sawtooth vertical tows contains CSTD and Mini-Ranger records. CSTD data processing was similar to the method described in Teeter et al. (1975). The recorded times were saved for later integration of horizontal position. Corrections were applied and spurious points removed. Some records (101575-3 and 101575-4 in particular) had noise in the CSTD data.

The depth portion of that record was filtered with a moving average to remove those spikes.

The Mini-Ranger record was reduced to even one or two minute samplings depending on the length of the tow. A least squares regression was done on these points to obtain a best-fit straight line. The horizontal distances along this line could then be added to the CSTD data at the appropriate times. These data were then made into a grid. Grid spacing was made 0.5 meters vertically and, usually, 25 meters horizontally. Empty grid points were filled by interpolating horizontally and vertically between measured points. Horizontal interpolation was weighted more heavily to compensate for vertical exaggeration in the grid and the vertical stability of the water column. The exact weighting was selected subjectively after some trials.

Contours could then be drawn on the grid. For this report, only alpha contours are given. Contours were drawn at intervals of 2 starting at an alpha of 2. Computer contour plots were reduced as needed to meet page size. They were then redrawn by hand, eliminating contours where necessary for clarity. All alpha contour plots have the same vertical exaggeration, 30:1.

REFERENCES

Browne, D. W. and R. J. Callaway. 1975 (ms). Dispersion of Sewage Sludge Discharged into New York Bight—Laboratory Studies of the Physical and Settling Characteristics of Sewage Sludge.

Callaway, R. J., A. M. Teeter, D. Browne, and G. Ditsworth. 1976. Preliminary Analysis of the Dispersion of Sewage Sludge Discharged from Vessels to New York Bight Waters. In: Proc. of the Symp. on Mid. Atl. Cont. Shelf and N.Y. Bight, M. G. Gross ed. Amer. Soc. Limn. and Oceano., Lawrence, Kansas.

Ditsworth, G. R., A. M. Teeter and R. J. Callaway. 1975 (ms). New York Bight Suspended Matter and Oceanographic Data: 1973-1974.

Hansler, G. M. 1976. Statement Before the Subcommittee of Oceanography, Fisheries and Wildlife Conservation, and the Enviornment Committee on Merchant Marine and Fisheries, U. S. House of Representatives. New York, N. Y. March 5, 1976.

National Oceanic and Atmospheric Administration, NOS. 1974. Tide Tables, 1975, East Coast of North and South America.

Pillsbury, R. D., J. S. Bottero, R. E. Still, and W. E. Gilbert. 1974. A Compilation of Observations from Moored Current Meters—Volume VI, Oregon Continental Shelf, April-October 1972. Data Rep. 57, Ref. 74-2. pp 191-230.

Teeter, A. M., R. J. Callaway, and D. W. Denbo. 1975 (ms). Dispersion of Sewage Sludge Discharged into New York Bight—Physical Oceanographic Data, December 1974.

APPENDIX A

Position Plots

Legend

⊙	Moored current meter station
⊠	Vertical sampling station
↑	Surface drogue
↓	Bottom drogue
*	Beginning or end of sawtooth vertical tow

Adjacent numerals refer to EDT

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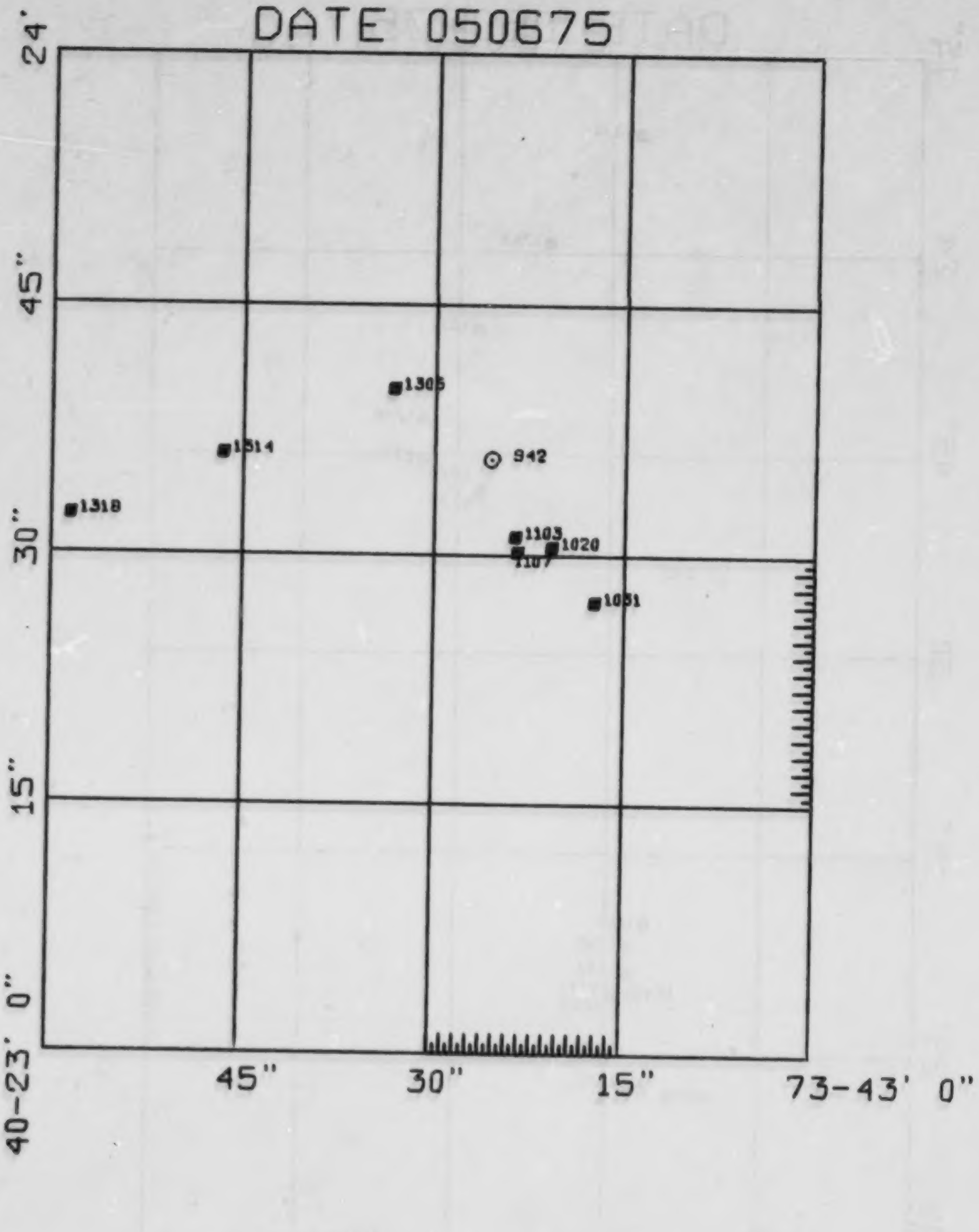
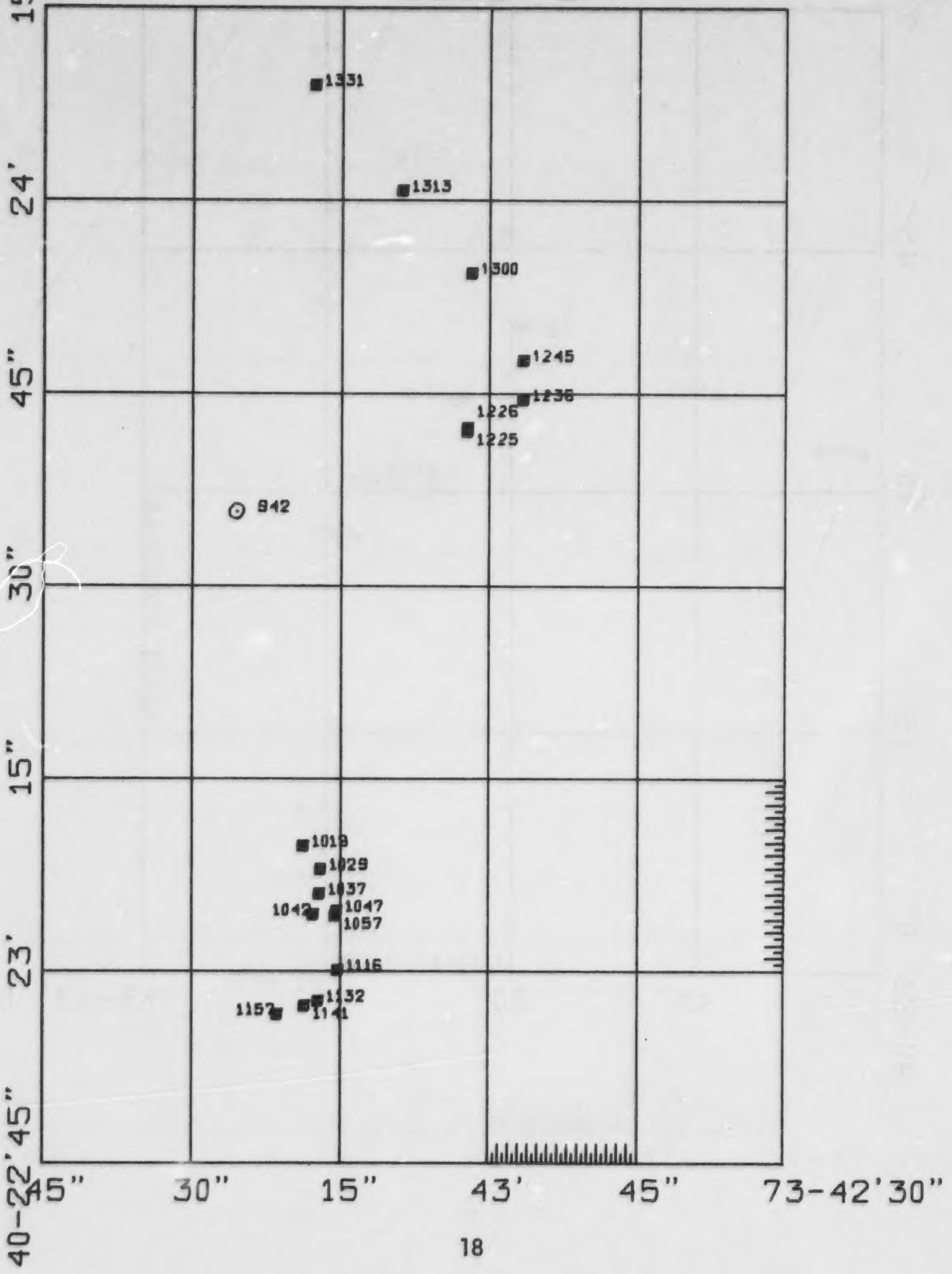


24'
45"
30"
15"
40-23' 0"
45"
30"
15"
73-43' 0"
1305
1314
1318
942
1103
1020
1107
1051

DATE 050875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1313
1300
1245
1236
1226
1225
942
1019
1029
1037
1042
1047
1057
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1132
1141
1157
15"
24'
45"
30"
15"
23'
40-22'45"
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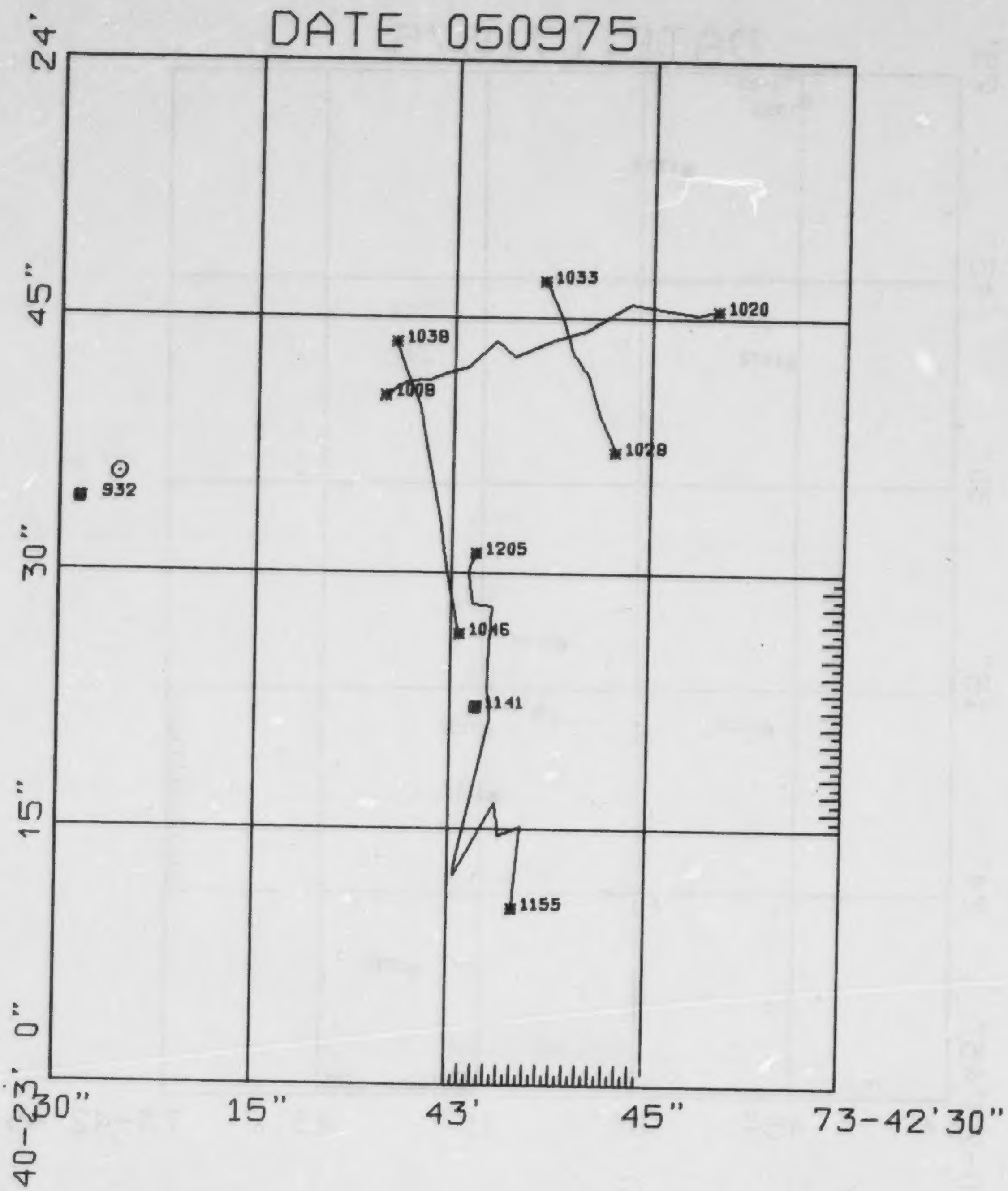
30"
15"
43'
45"
73-42'30"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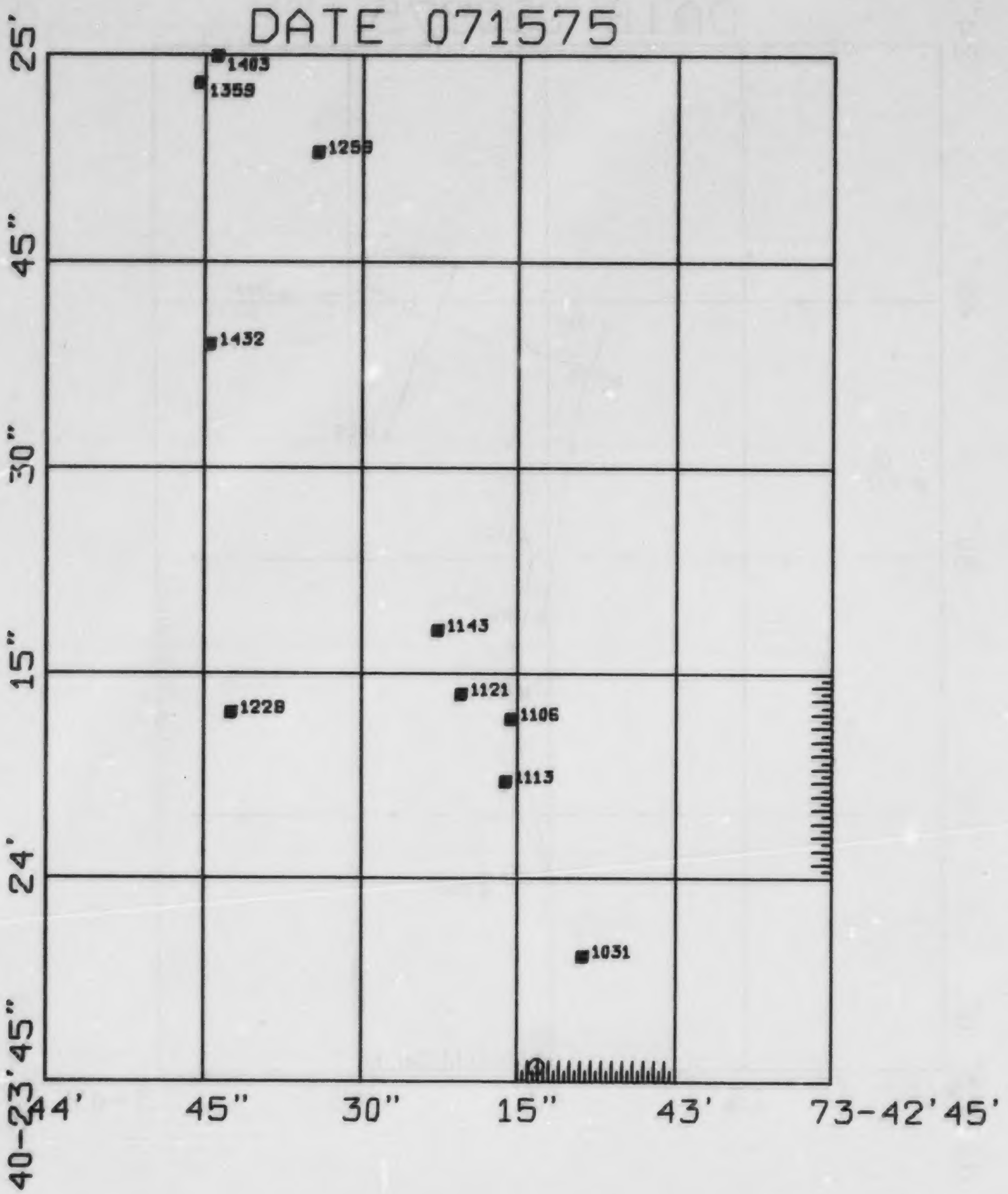
45"
30"
15"
0"
40-23' 30"
15"
43'
45"
73-42'30"
932
1033
1020
1038
1008
1028
1205
1046
1141
1155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30"
15"
24'
40-23'45"
44'
45"
30"
15"
43'
73-42'45'
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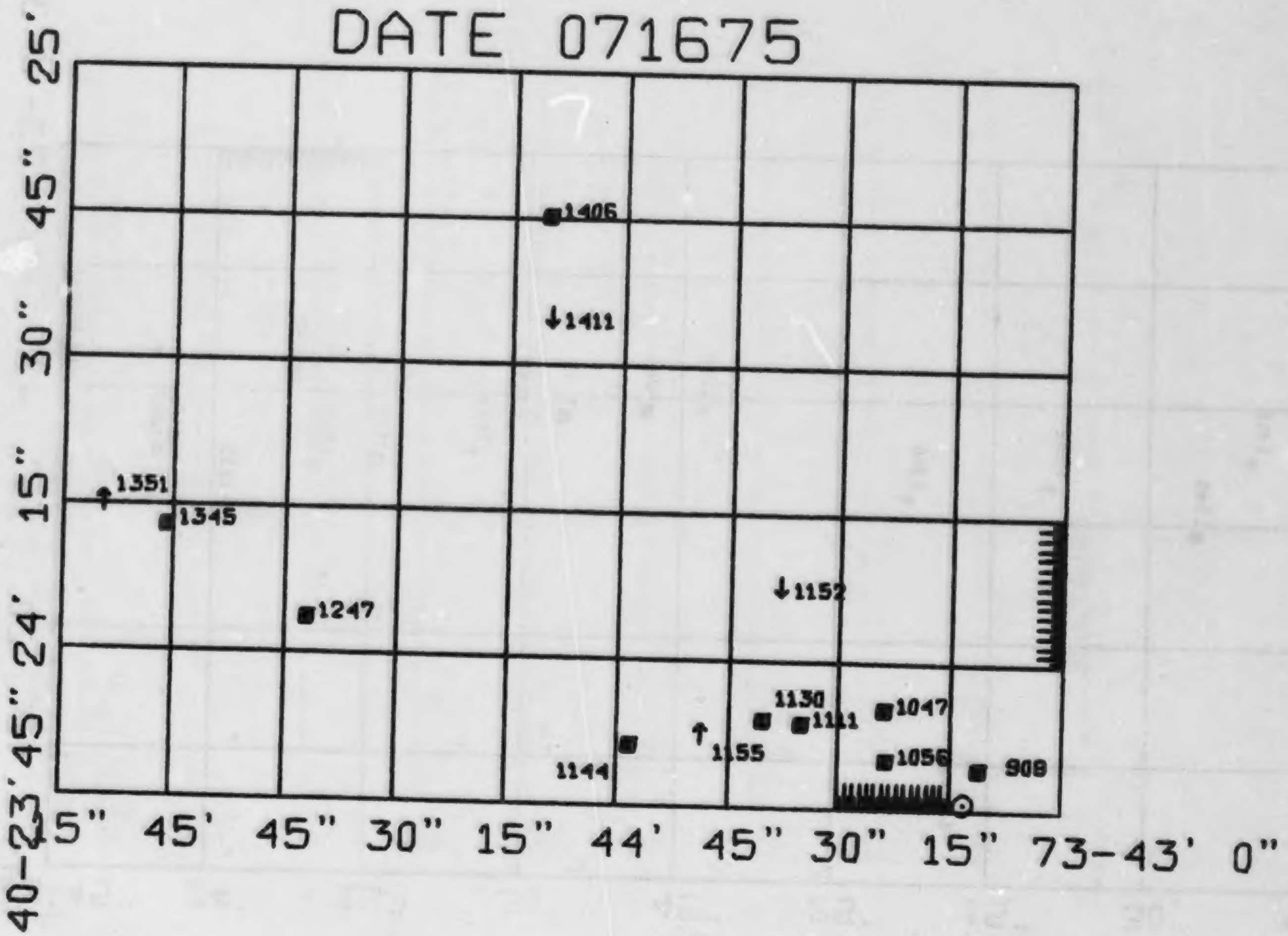
1121
1228
1106
1113
1031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30"
15"
24'
45"
40-23'
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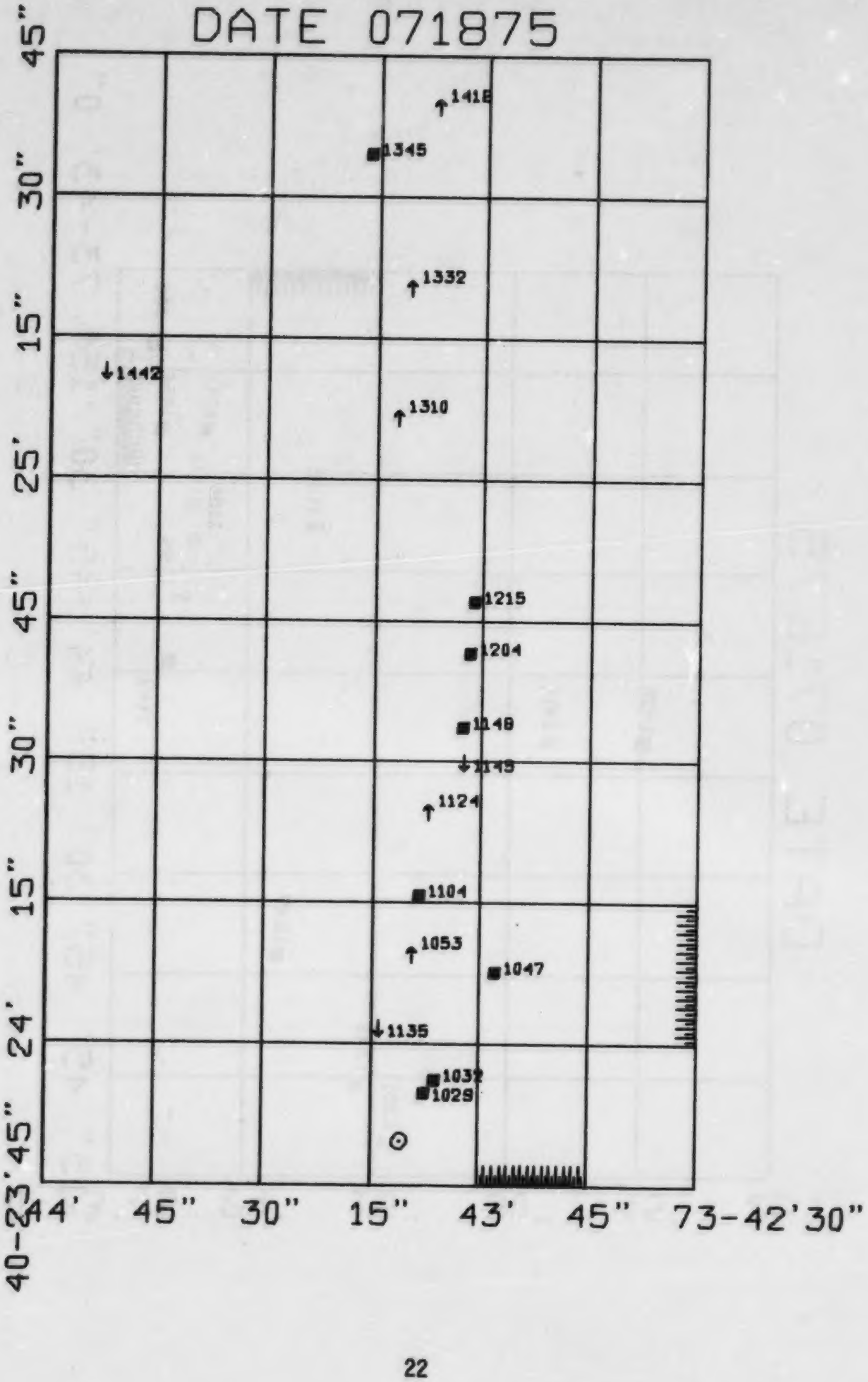
45'
45"
30"
15"
44'
45"
30"
15"
73-43' 0"
1406
1411
1351
1345
1247
1152
1130
1111
1047
1144
1155
1056
908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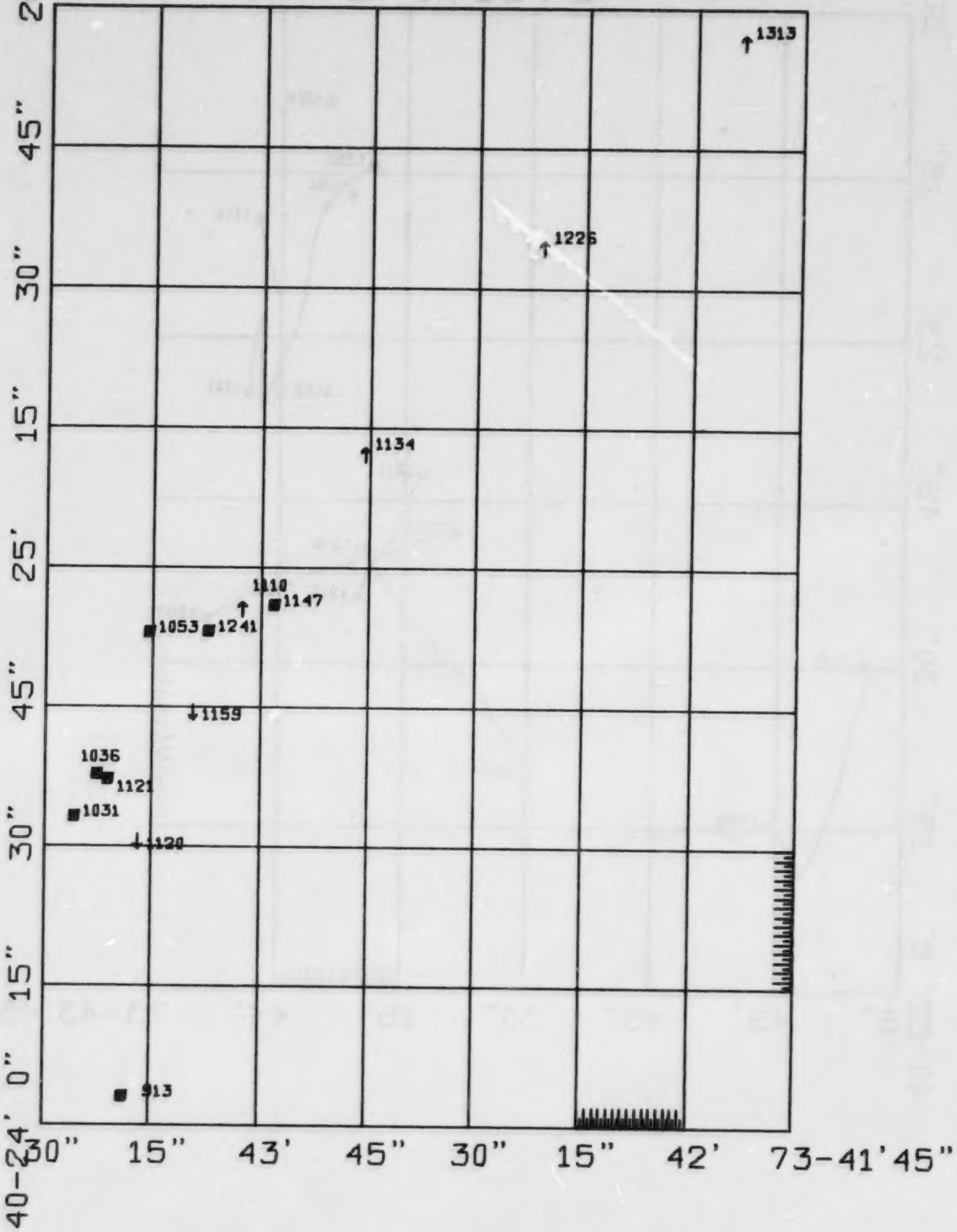
1418
1345
1332
1442
1310
1215
1204
1148
1145
1124
1104
1053
1047
1135
1032
1029
45"
30"
15"
25'
45"
30"
15"
24'
40-23'45"
44'
45"
30"
15"
43'
45"
73-42'30"

DATE 071975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30"
15"
0"
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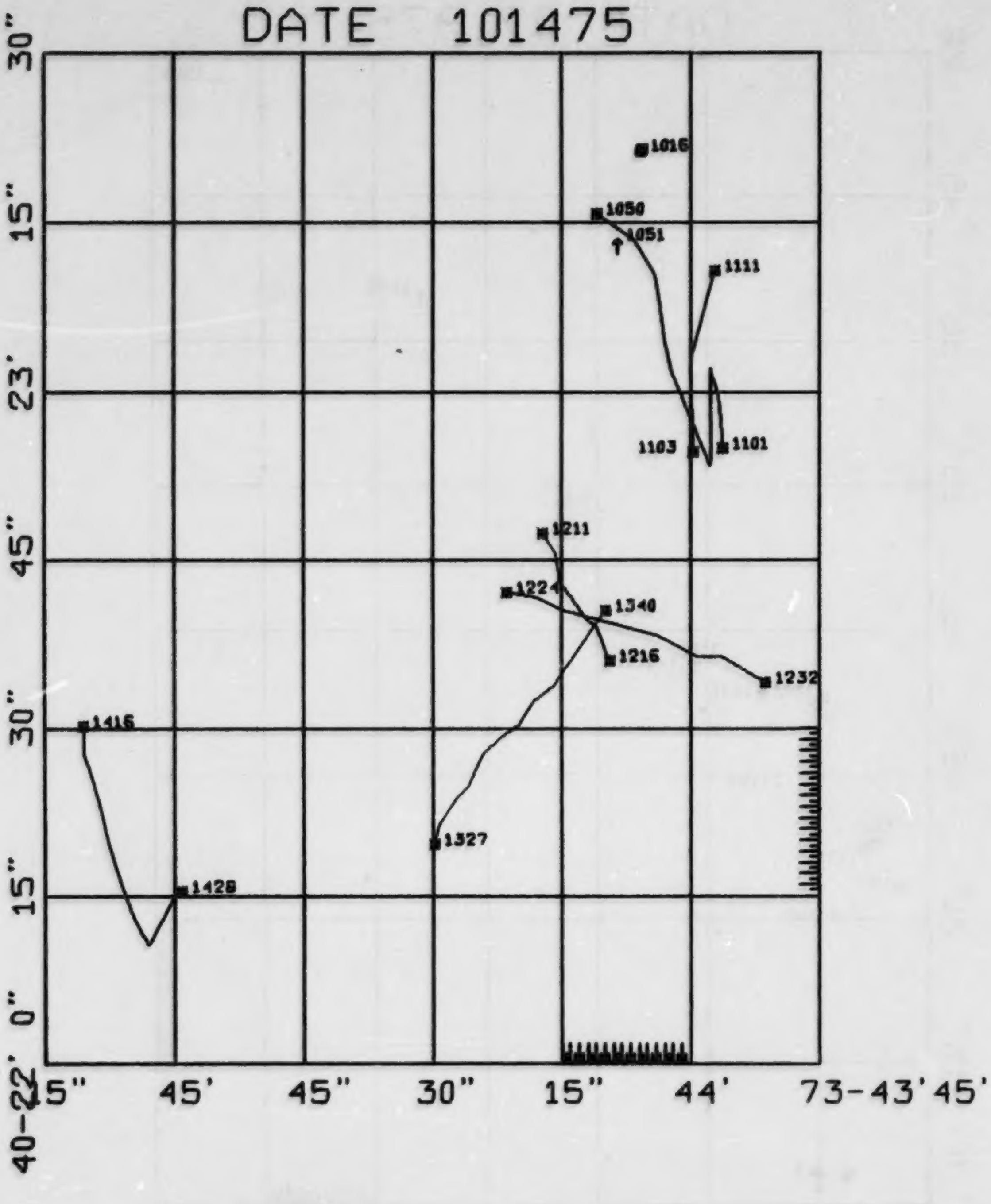
1226
1134
1110
1147
1053
1241
1159
1036
1121
1031
1120
913
30"
15"
43'
45"
30"
15"
42'
73-41'45"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1016
1050
1051
1111
1103
1101
1211
1224
1340
1216
1232
1416
1428
1327
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15"
23'
45"
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45'
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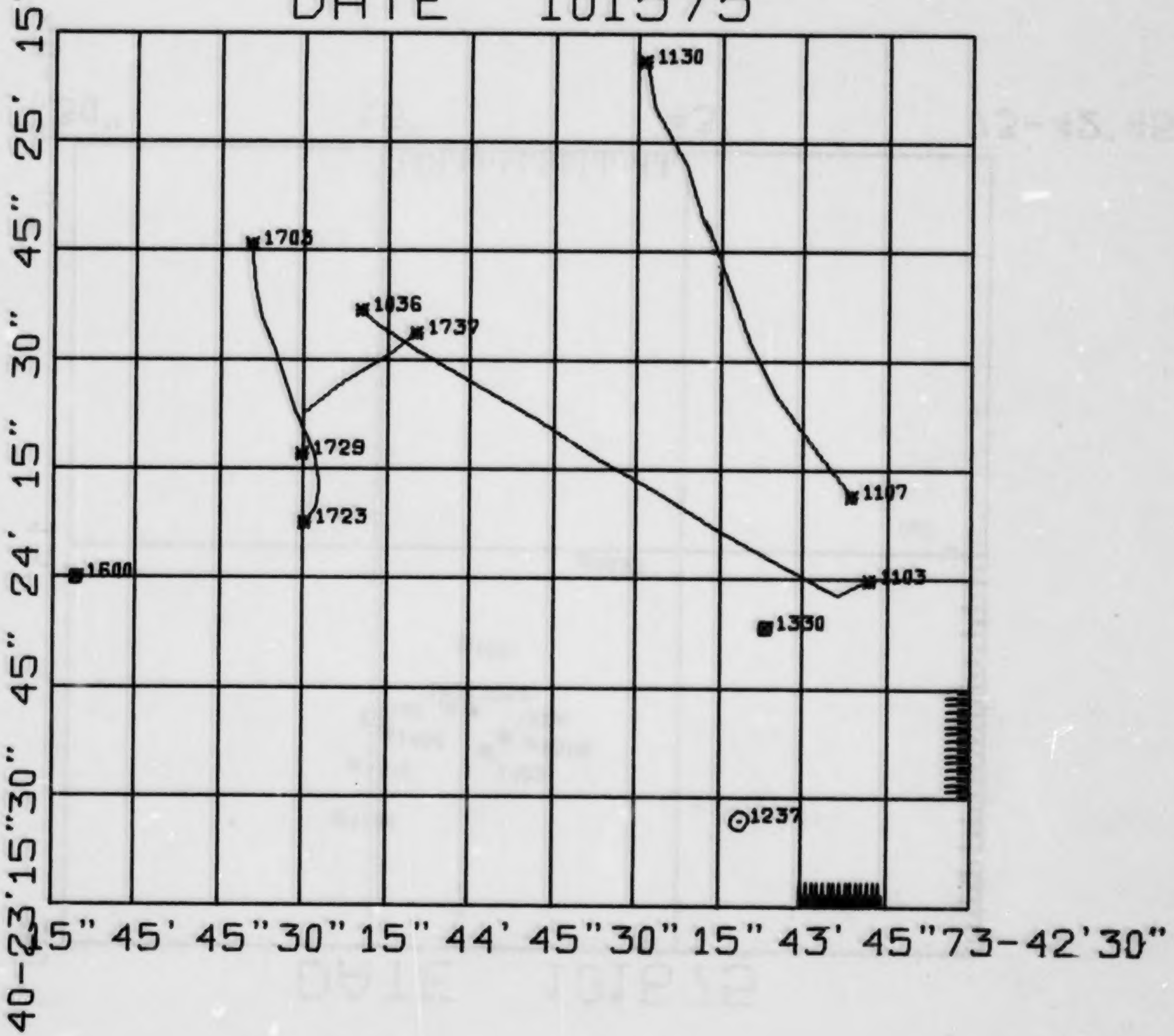
30"
15"
44'
73-43'45'

DATE 101575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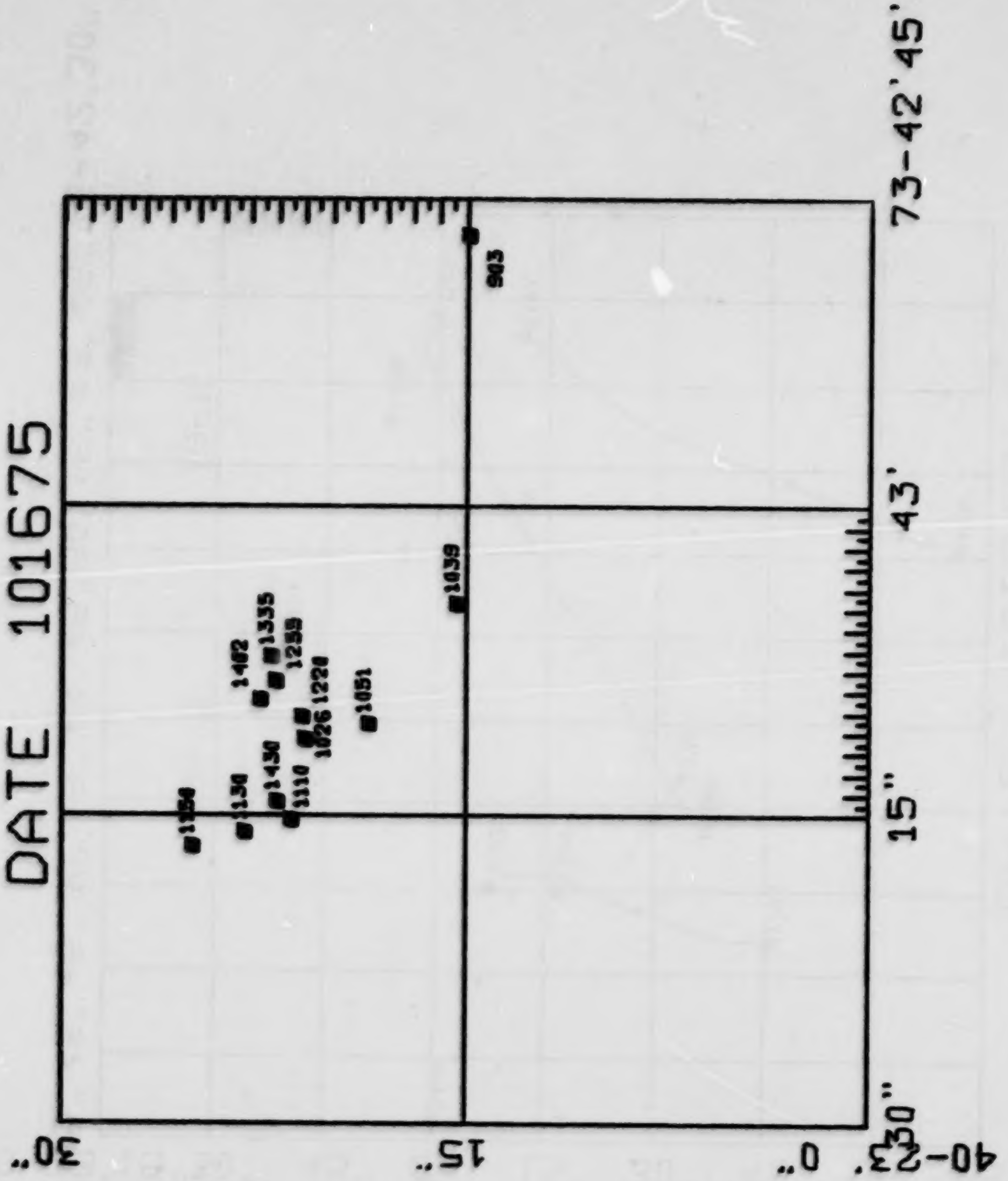
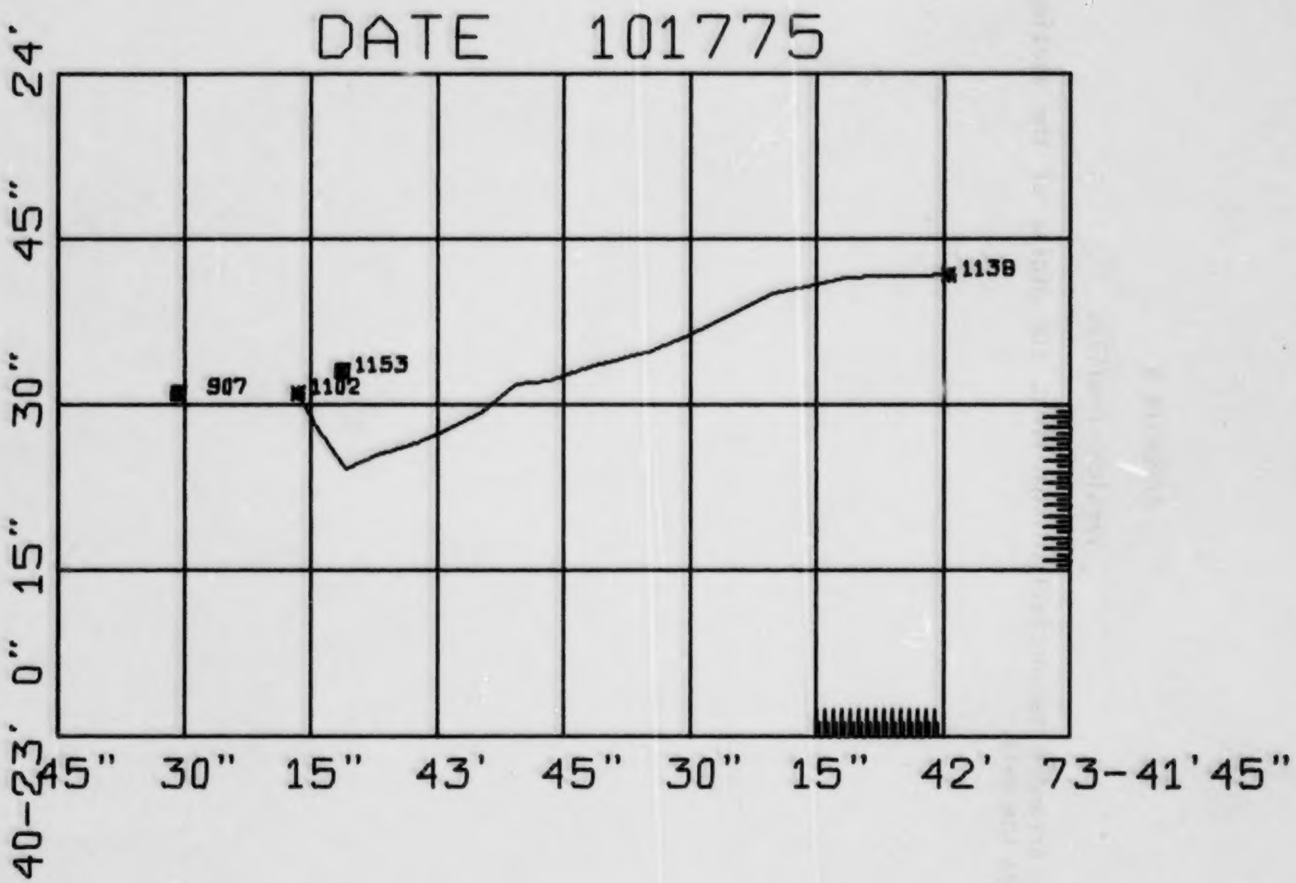
1703
1036
1737
1729
1723
1600
1107
1103
1330
1237
15"
25'
45"
30"
15"
24'
45"
30"
15"
40-23'
15" 45' 45" 30" 15" 44' 45" 30" 15" 43' 45" 73-42'30"


DATE 101675

30"
15"
0"
40-23'30"
73-42'45'
43'
15"
30"
903
1039
1335
1402
1259
1220
1051
1026
1430
1110
1130
1354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24'
45"
30"
15"
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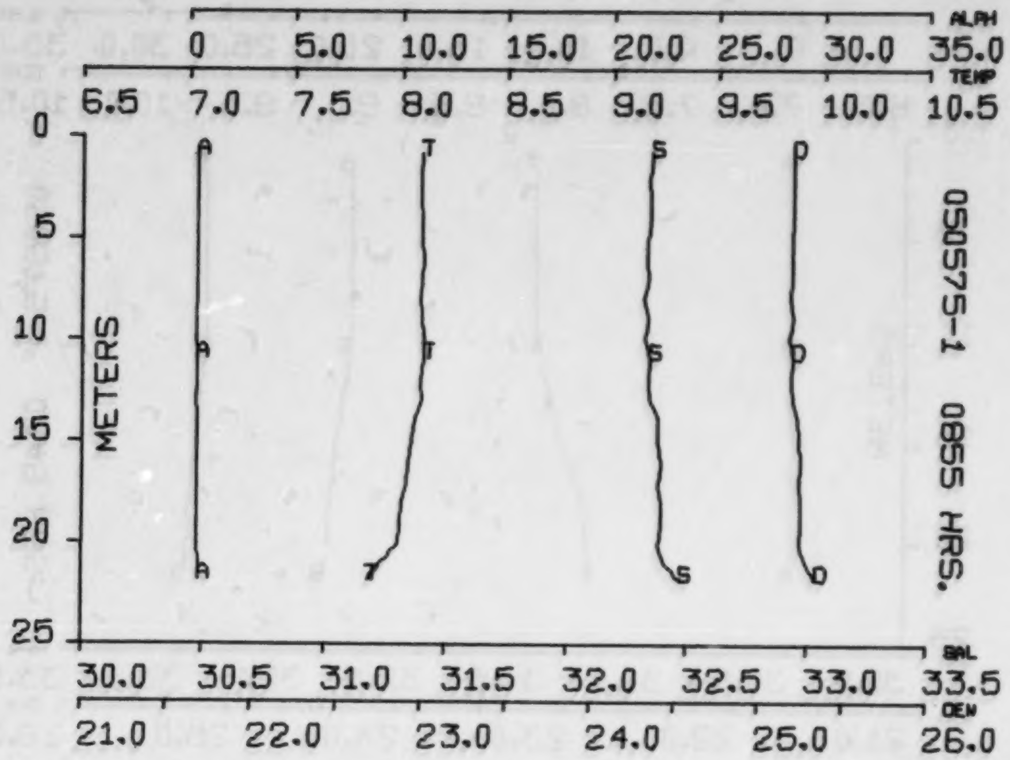
45"
30"
15"
43'
45"
30"
15"
42'
73-41'45"
907
1102
1153
1138

APPENDIX B

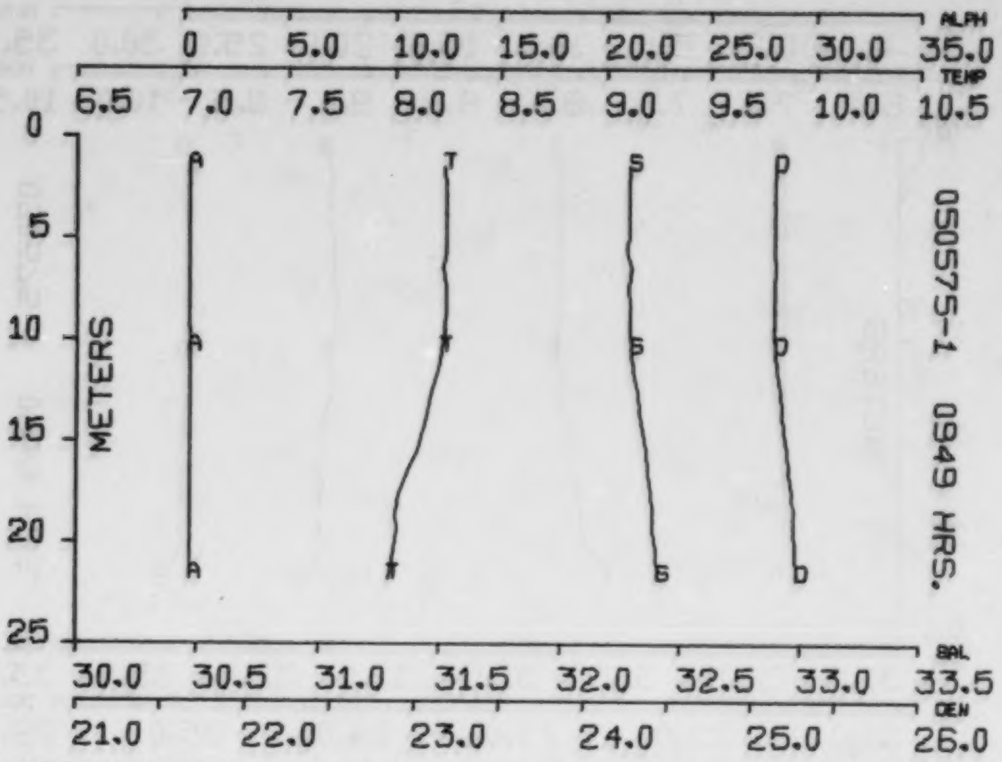
Vertical Profiles

Data is arranged sequentially. The first six digits of the station number indicates the date.



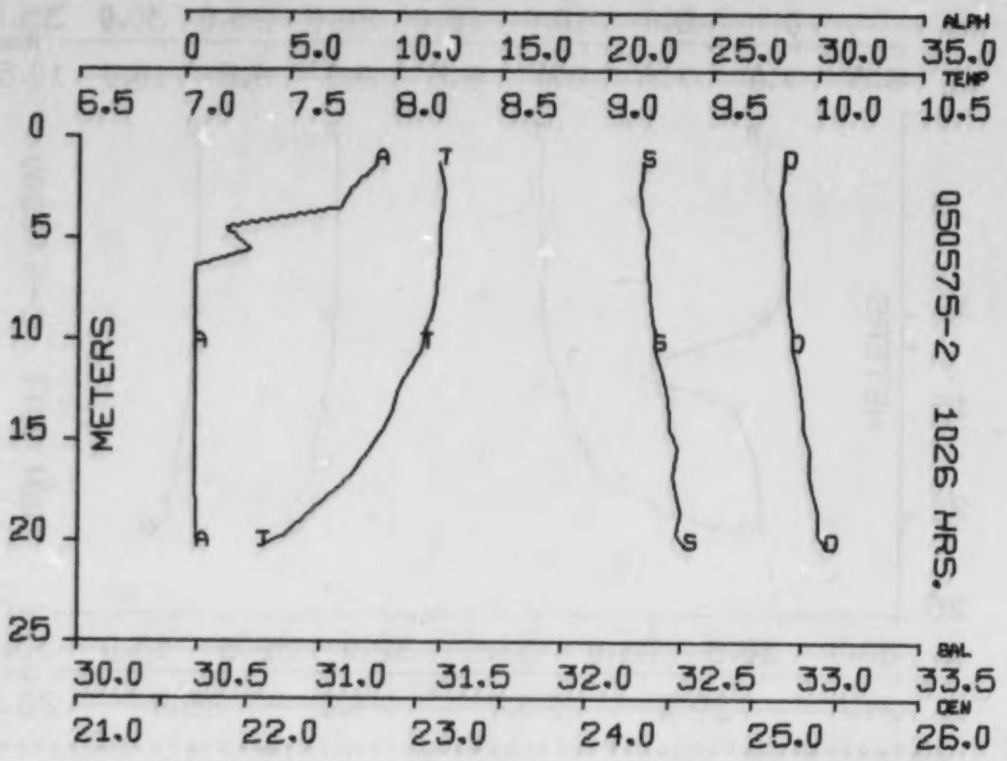
```
****************************************************
*                                                  *
*    STATION  050575-1   0855  HRS.                *
*    AT DUMPSITE BEFORE SLUDGE DISCHARGE           *
*                                                  *
****************************************************
```

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	32.36	8.11	25.21	96	.42
1.0	32.35	8.10	25.20	96	.42
2.0	32.34	8.09	25.20	96	.41
3.0	32.35	8.09	25.20	96	.45
4.0	32.34	8.10	25.20	96	.41
5.0	32.33	8.10	25.19	96	.43
6.0	32.33	8.11	25.19	96	.41
7.0	32.34	8.10	25.19	96	.42
8.0	32.32	8.09	25.18	96	.42
9.0	32.34	8.10	25.19	96	.39
10.0	32.33	8.11	25.18	96	.40
11.0	32.35	8.10	25.20	96	.40
12.0	32.34	8.09	25.19	96	.40
13.0	32.35	8.09	25.20	96	.39
14.0	32.38	8.07	25.23	96	.41
15.0	32.38	8.05	25.24	96	.41
16.0	32.40	8.04	25.25	96	.42
17.0	32.38	8.03	25.24	96	.43
18.0	32.40	8.00	25.25	96	.42
19.0	32.40	7.99	25.25	96	.44
20.0	32.38	7.99	25.24	96	.44
21.0	32.41	7.91	25.28	95	.50



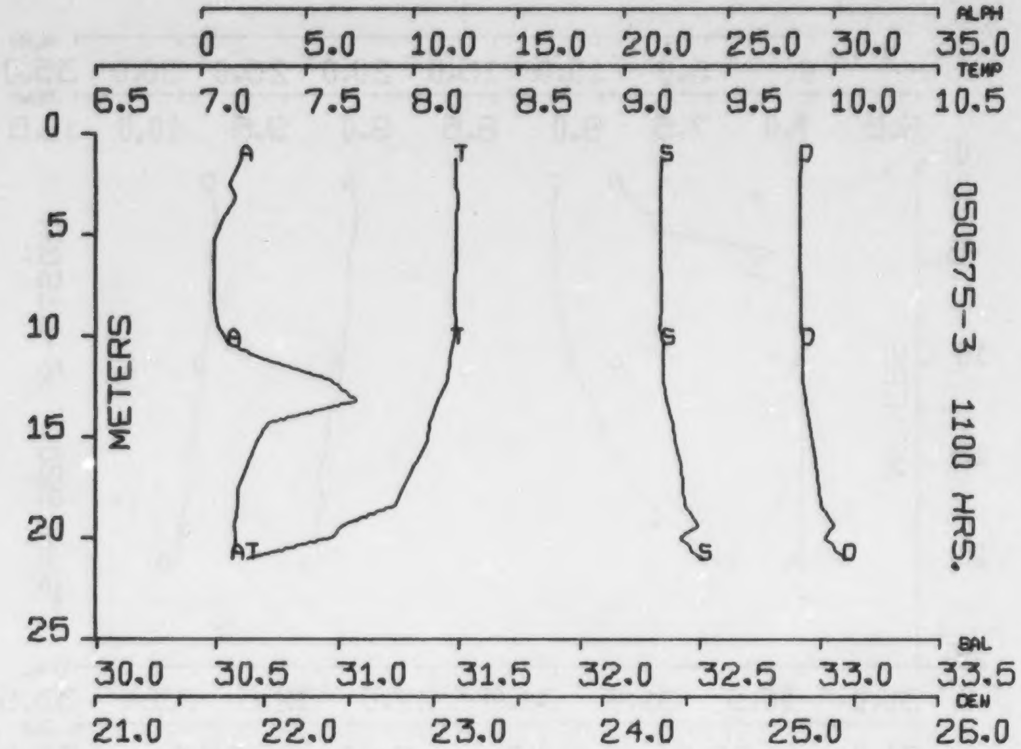
```
*****************************************************************
*                                                               *
*    STATION  050575-1   0949  HRS.                             *
*    AT DUMPSITE BEFORE SLUDGE DISCHARGE                        *
*                                                               *
*****************************************************************
```

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	32.30	8.22	25.15	97	.34
1.0	32.29	8.23	25.14	97	.35
2.0	32.28	8.24	25.13	96	.36
3.0	32.28	8.25	25.13	97	.36
4.0	32.28	8.24	25.13	97	.35
5.0	32.28	8.24	25.13	97	.35
6.0	32.29	8.24	25.13	97	.35
7.0	32.29	8.24	25.13	97	.34
8.0	32.29	8.24	25.13	97	.34
9.0	32.29	8.24	25.13	97	.34
10.0	32.29	8.23	25.14	97	.34
11.0	32.30	8.21	25.15	97	.33
12.0	32.31	8.19	25.16	97	.33
13.0	32.33	8.16	25.18	97	.34
14.0	32.34	8.14	25.19	97	.35
15.0	32.35	8.12	25.20	97	.34
16.0	32.36	8.08	25.21	97	.35
17.0	32.37	8.04	25.23	96	.36
18.0	32.38	8.01	25.24	96	.36
19.0	32.39	8.01	25.25	96	.36
20.0	32.40	8.00	25.26	96	.36
21.0	32.41	7.99	25.26	96	.36



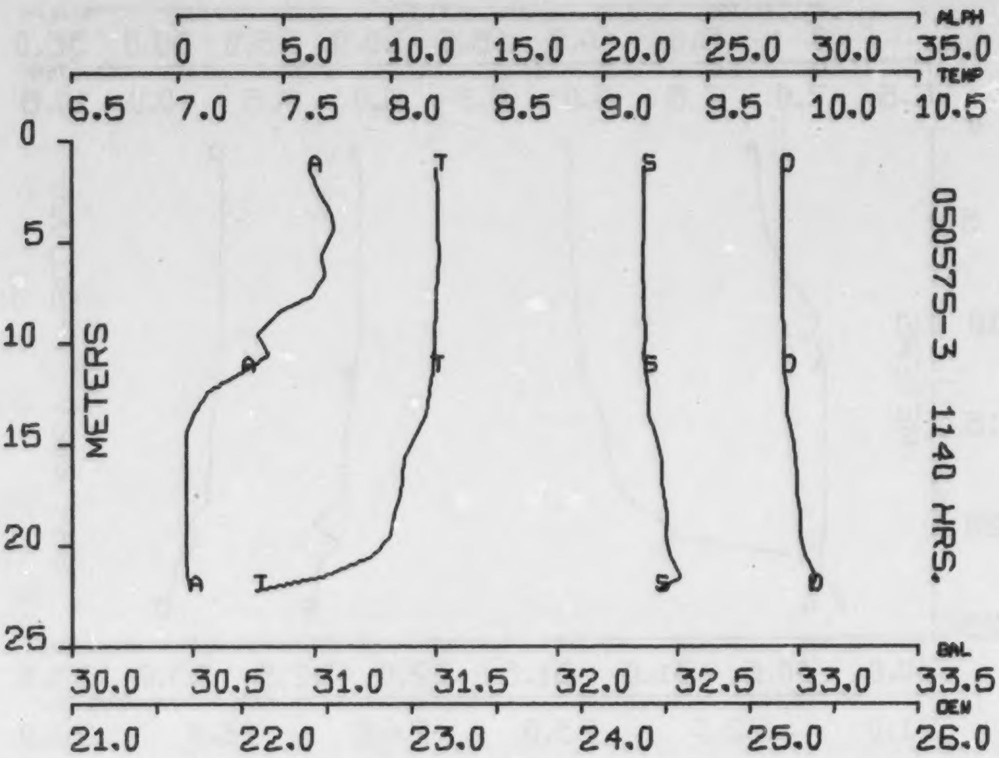
STATION 050575-2 1026 HRS.
AT DUMPSITE 11 MINUTES AFTER SLUDGE DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	32.36	8.18	25.20	35	10.33
1.0	32.34	8.20	25.18	39	9.33
2.0	32.33	8.22	25.17	44	8.32
3.0	32.33	8.22	25.17	47	7.58
4.0	32.34	8.21	25.18	67	4.33
5.0	32.35	8.20	25.19	77	2.63
6.0	32.36	8.20	25.20	86	1.62
7.0	32.36	8.19	25.20	95	.54
8.0	32.37	8.18	25.20	95	.51
9.0	32.38	8.16	25.22	95	.51
10.0	32.39	8.13	25.23	95	.52
11.0	32.41	8.09	25.25	95	.51
12.0	32.43	8.03	25.28	95	.52
13.0	32.44	8.00	25.29	95	.51
14.0	32.45	7.96	25.30	95	.51
15.0	32.47	7.90	25.33	95	.51
16.0	32.48	7.83	25.34	95	.53
17.0	32.47	7.75	25.35	95	.55
18.0	32.49	7.65	25.38	95	.56
19.0	32.50	7.54	25.40	94	.59



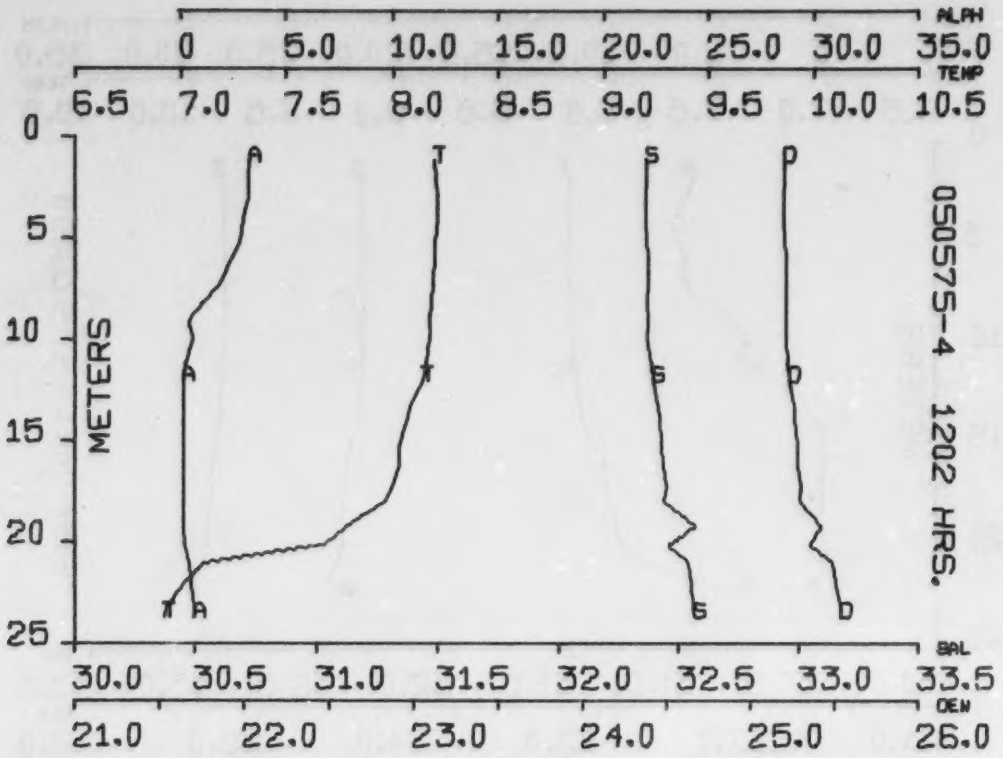
```
**************************************************************
*                                                            *
*    STATION  050575-3   1100   HRS.                         *
*    AT DUMPSITE 45 MINUTES AFTER SLUDGE DISCHARGE           *
*                                                            *
**************************************************************
```

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	32.34	8.20	25.18	78	2.46
1.0	32.34	8.20	25.18	82	1.99
2.0	32.33	8.20	25.17	86	1.52
3.0	32.33	8.21	25.17	85	1.64
4.0	32.33	8.21	25.17	90	1.11
5.0	32.33	8.20	25.17	93	.67
6.0	32.33	8.20	25.17	94	.60
7.0	32.34	8.20	25.18	94	.58
8.0	32.34	8.20	25.18	94	.58
9.0	32.33	8.20	25.18	93	.72
10.0	32.34	8.19	25.18	90	1.11
11.0	32.34	8.18	25.19	77	2.64
12.0	32.34	8.16	25.19	58	5.60
13.0	32.36	8.13	25.20	49	7.09
14.0	32.38	8.09	25.23	67	4.19
15.0	32.40	8.07	25.24	77	2.67
16.0	32.42	8.03	25.27	80	2.29
17.0	32.43	7.98	25.28	83	1.89
18.0	32.43	7.93	25.29	84	1.71
19.0	32.47	7.74	25.35	85	1.61
20.0	32.42	7.58	25.33	85	1.63



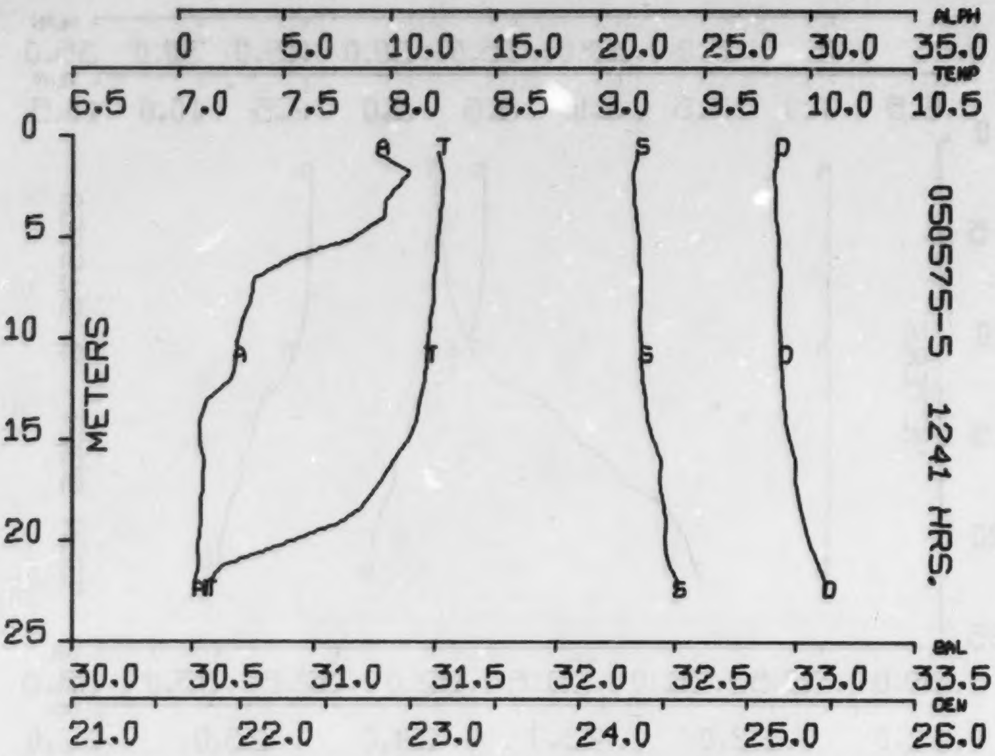
```
********************************************************
*                                                      *
*    STATION  050575-3   1140  HRS.                    *
*    AT DUMPSITE 85 MINUTES AFTER SLUDGE DISCHARGE     *
*                                                      *
********************************************************
```

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	32.36	8.21	25.20	57	5.67
1.0	32.36	8.21	25.19	55	6.05
2.0	32.36	8.22	25.19	53	6.42
3.0	32.36	8.22	25.19	50	6.90
4.0	32.36	8.22	25.19	48	7.27
5.0	32.35	8.22	25.19	50	6.97
6.0	32.35	8.22	25.19	51	6.81
7.0	32.36	8.22	25.19	52	6.61
8.0	32.36	8.21	25.19	58	5.45
9.0	32.36	8.21	25.20	66	4.18
10.0	32.36	8.20	25.20	67	3.98
11.0	32.36	8.20	25.20	70	3.59
12.0	32.38	8.19	25.21	82	1.98
13.0	32.38	8.17	25.22	91	.98
14.0	32.40	8.14	25.23	95	.52
15.0	32.42	8.09	25.26	96	.38
16.0	32.43	8.06	25.28	96	.38
17.0	32.44	8.05	25.28	96	.39
18.0	32.45	8.03	25.29	96	.37
19.0	32.45	8.00	25.30	96	.38
20.0	32.46	7.95	25.31	96	.39
21.0	32.49	7.80	25.36	96	.42
22.0	32.44	7.43	25.37	94	.57



```
**********************************************************
*                                                        *
*    STATION  050575-4   1202  HRS.                      *
*    AT DUMPSITE 107 MINUTES AFTER SLUDGE DISCHARGE      *
*                                                        *
**********************************************************
```

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	32.37	8.18	25.20	72	3.34
1.0	32.37	8.19	25.20	72	3.26
2.0	32.36	8.20	25.20	73	3.19
3.0	32.36	8.21	25.19	73	3.18
4.0	32.36	8.21	25.19	74	2.96
5.0	32.36	8.20	25.20	76	2.80
6.0	32.37	8.19	25.21	79	2.36
7.0	32.37	8.19	25.21	83	1.92
8.0	32.37	8.18	25.21	89	1.20
9.0	32.37	8.17	25.21	97	.35
10.0	32.37	8.17	25.21	95	.53
11.0	32.38	8.16	25.22	97	.26
12.0	32.39	8.14	25.23	99	.11
13.0	32.41	8.09	25.25	99	.13
14.0	32.42	8.06	25.27	99	.10
15.0	32.43	8.03	25.28	99	.10
16.0	32.43	8.03	25.28	99	.12
17.0	32.45	8.00	25.30	99	.12
18.0	32.45	7.95	25.30	99	.12
19.0	32.56	7.80	25.41	99	.14
20.0	32.46	7.68	25.35	98	.23
21.0	32.54	7.13	25.49	96	.43
22.0	32.55	7.01	25.51	95	.52
23.0	32.56	6.94	25.53	94	.63



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*********************************************************************
*                                                                   *
*    STATION  050575-5   1241  HRS.                                 *
*    AT DUMPSITE 146 MINUTES AFTER SLUDGE DISCHARGE                 *
*                                                                   *
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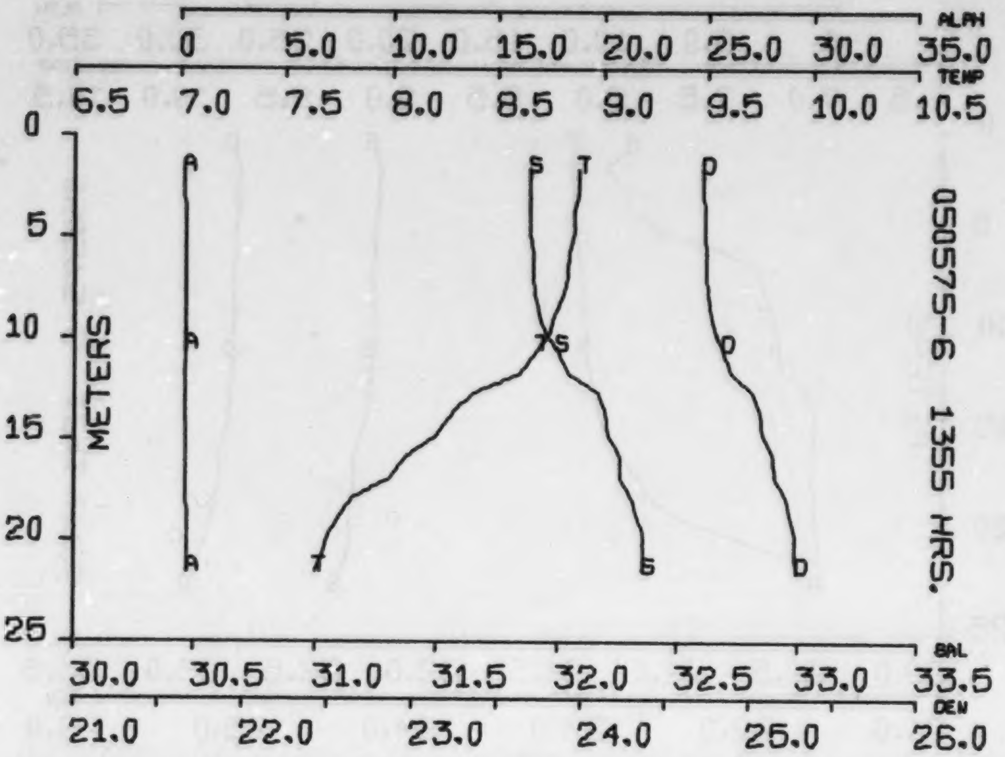
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	32.36	8.21	25.20	45	7.89
1.0	32.34	8.23	25.18	38	9.62
2.0	32.32	8.25	25.16	34	10.76
3.0	32.33	8.24	25.17	37	9.87
4.0	32.34	8.23	25.17	39	9.55
5.0	32.35	8.22	25.19	44	8.11
6.0	32.35	8.21	25.19	60	5.19
7.0	32.36	8.20	25.19	70	3.59
8.0	32.36	8.20	25.19	71	3.38
9.0	32.36	8.19	25.19	74	3.03
10.0	32.36	8.18	25.20	75	2.82
11.0	32.36	8.18	25.20	76	2.70
12.0	32.37	8.16	25.21	79	2.37
13.0	32.38	8.14	25.22	88	1.30
14.0	32.38	8.12	25.23	90	1.03
15.0	32.41	8.08	25.25	90	1.06
16.0	32.44	8.02	25.29	89	1.22
17.0	32.44	7.96	25.29	89	1.14
18.0	32.45	7.88	25.31	90	1.06
19.0	32.46	7.77	25.34	90	1.06
20.0	32.46	7.52	25.37	91	.96
21.0	32.48	7.26	25.42	91	.97
22.0	32.51	7.14	25.46	93	.75



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**********************************************************
*                                                        *
*    STATION  050575-6   1355  HRS.                      *
*    OUT OF DUMP AREA                                    *
*                                                        *
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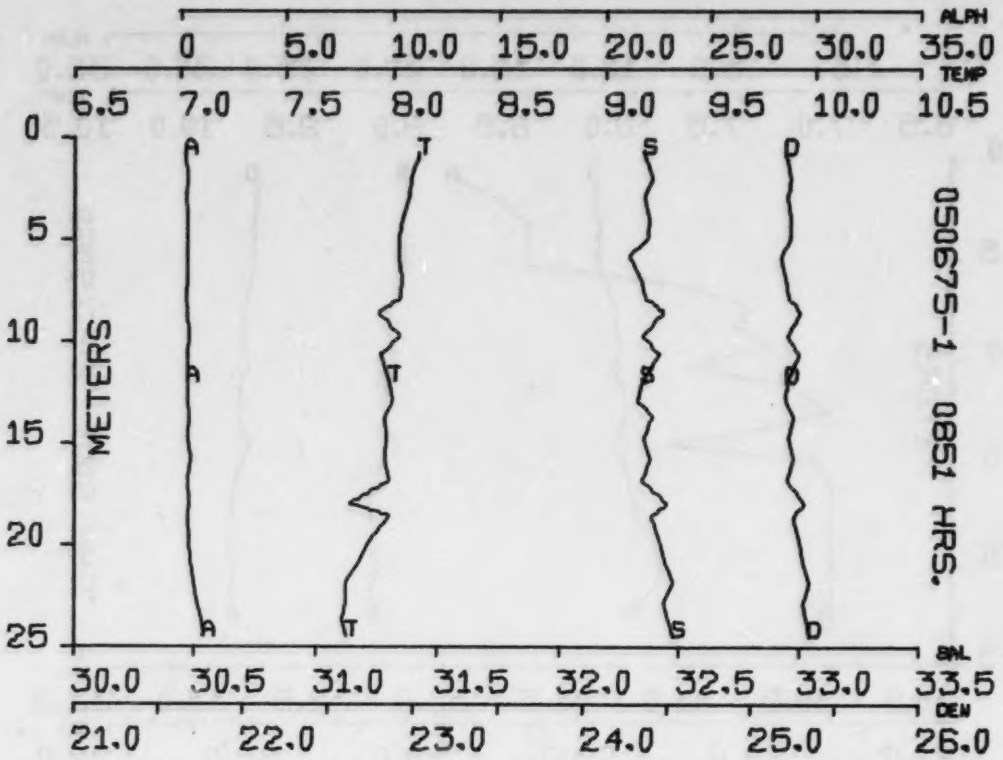
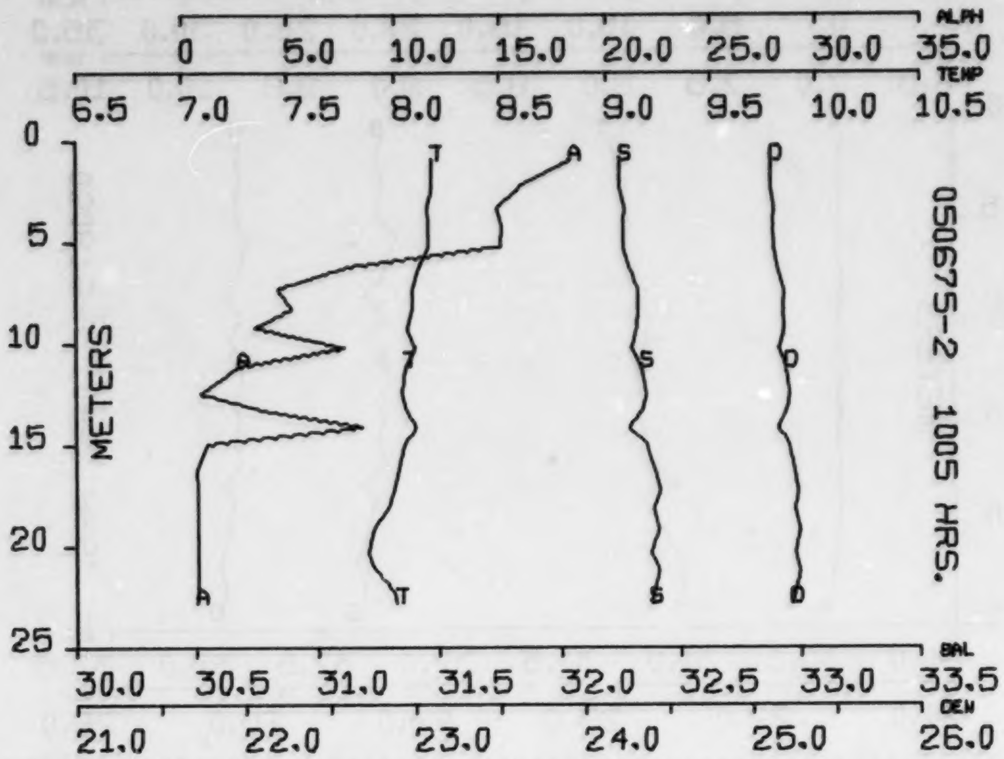
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	31.88	8.88	24.72	98	.23
1.0	31.88	8.88	24.72	98	.23
2.0	31.88	8.88	24.72	98	.23
3.0	31.88	8.87	24.72	98	.24
4.0	31.89	8.86	24.73	98	.25
5.0	31.89	8.85	24.73	98	.25
6.0	31.90	8.83	24.74	97	.26
7.0	31.90	8.83	24.74	97	.28
8.0	31.91	8.80	24.76	97	.27
9.0	31.93	8.76	24.78	97	.26
10.0	31.97	8.72	24.81	98	.25
11.0	32.02	8.65	24.86	98	.24
12.0	32.09	8.53	24.94	98	.23
13.0	32.18	8.35	25.04	98	.23
14.0	32.21	8.26	25.07	98	.24
15.0	32.22	8.17	25.09	98	.25
16.0	32.26	8.05	25.14	97	.27
17.0	32.27	7.96	25.16	97	.29
18.0	32.32	7.80	25.22	97	.31
19.0	32.34	7.73	25.25	97	.32
20.0	32.36	7.69	25.27	97	.32
21.0	32.36	7.65	25.27	97	.32



STATION 050675-1 0851 HRS.
AT DUMPSITE BEFORE SLUDGE DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	32.33	8.15	25.18	97	.25
1.0	32.36	8.11	25.21	97	.31
2.0	32.38	8.08	25.23	96	.36
3.0	32.36	8.07	25.21	97	.32
4.0	32.37	8.04	25.23	97	.35
5.0	32.36	8.03	25.22	97	.35
6.0	32.30	8.03	25.18	96	.38
7.0	32.34	8.04	25.21	97	.34
8.0	32.38	8.01	25.24	97	.33
9.0	32.40	7.98	25.26	96	.40
10.0	32.37	8.00	25.24	96	.43
11.0	32.39	7.96	25.26	96	.39
12.0	32.34	7.99	25.21	96	.37
13.0	32.34	7.99	25.21	96	.39
14.0	32.37	7.97	25.24	96	.40
15.0	32.36	7.97	25.23	96	.42
16.0	32.37	7.97	25.24	95	.47
17.0	32.36	7.95	25.23	96	.41
18.0	32.44	7.83	25.31	96	.43
19.0	32.40	7.95	25.27	96	.41
20.0	32.43	7.88	25.30	96	.45
21.0	32.45	7.83	25.32	95	.54
22.0	32.47	7.78	25.34	93	.73
23.0	32.44	7.78	25.32	91	.89
24.0	32.47	7.77	25.34	90	1.10



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*****************************************************************
*                                                               *
*    STATION  050675-2   1005  HRS.                             *
*    AT DUMPSITE 11 MINUTES AFTER SLUDGE DISCHARGE              *
*                                                               *
*****************************************************************

DEPTH    SALINITY    TEMPERATURE    SIGMA-T    TRANSMIT.    ALPHA
 (M)       (PPT)         (C)                      (%)       (M-1)
   0       32.25         8.18        25.11         13       20.06
  1.0      32.24         8.18        25.11         16       18.19
  2.0      32.24         8.18        25.11         20       16.31
  3.0      32.26         8.16        25.12         22       15.16
  4.0      32.26         8.16        25.12         22       15.06
  5.0      32.26         8.16        25.13         22       15.03
  6.0      32.29         8.13        25.15         41        9.18
  7.0      32.32         8.09        25.18         60        5.27
  8.0      32.32         8.08        25.18         60        5.04
  9.0      32.32         8.07        25.18         69        3.76
 10.0      32.30         8.09        25.17         51        6.82
 11.0      32.33         8.05        25.20         73        3.29
 12.0      32.35         8.04        25.21         87        1.47
 13.0      32.35         8.05        25.21         76        2.88
 14.0      32.29         8.11        25.15         45        8.14
 15.0      32.36         8.04        25.22         89        1.17
 16.0      32.39         8.02        25.24         93         .78
 17.0      32.41         8.00        25.27         93         .73
 18.0      32.39         7.97        25.25         93         .74
 19.0      32.41         7.91        25.27         93         .77
 20.0      32.38         7.88        25.26         93         .77
 21.0      32.40         7.90        25.27         93         .75
 22.0      32.39         7.98        25.25         93         .73
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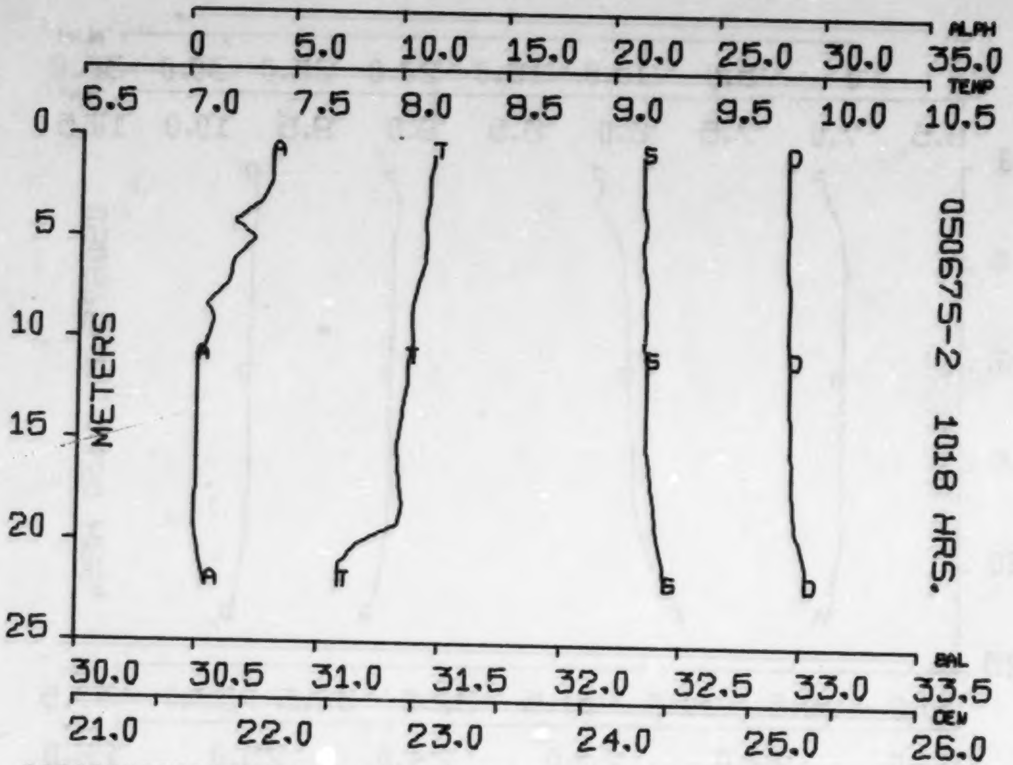
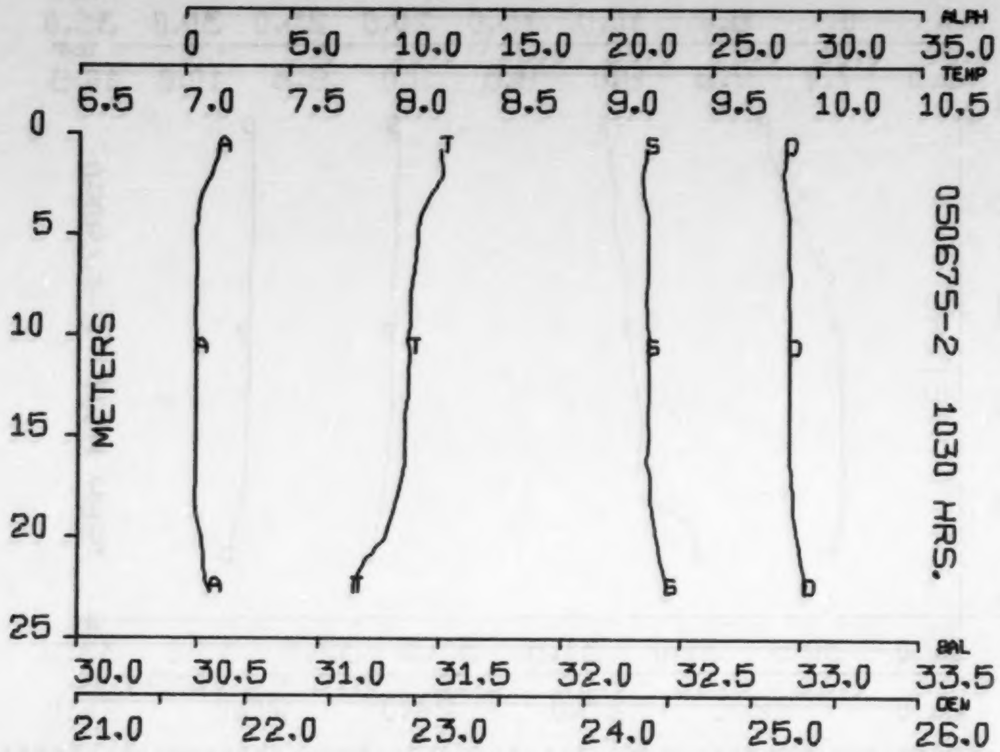


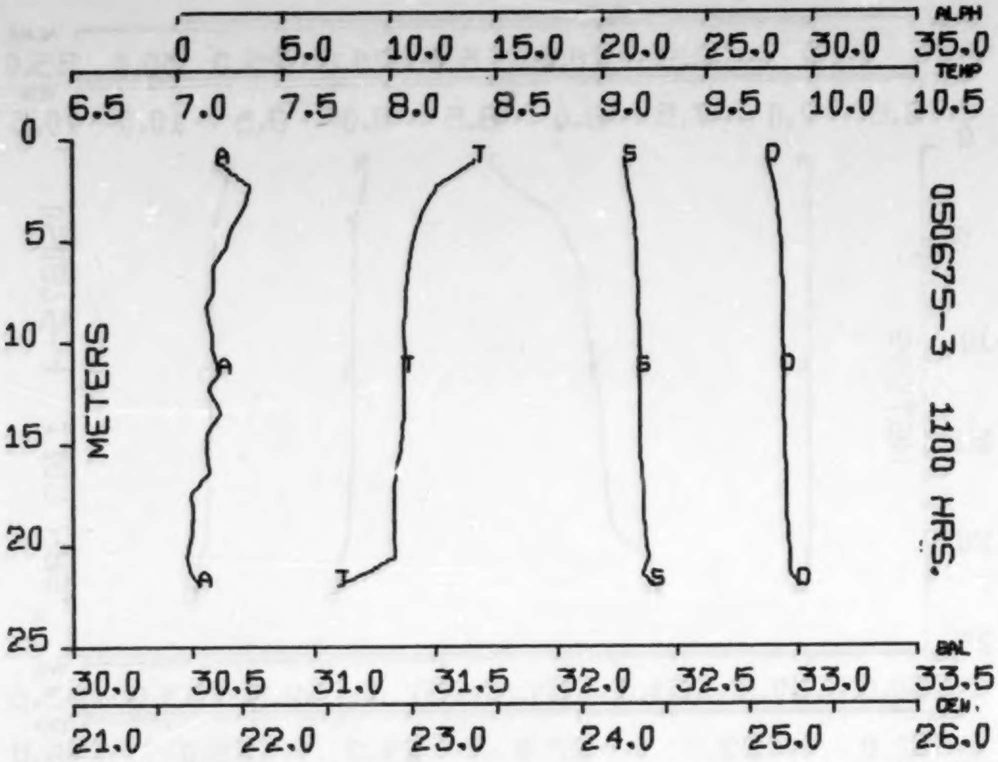
STATION 050675-2 1018 HRS.
AT DUMPSITE 24 MINUTES AFTER SLUDGE DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	32.32	8.18	25.17	66	4.10
1.0	32.33	8.16	25.18	67	4.08
2.0	32.33	8.14	25.18	67	4.05
3.0	32.33	8.14	25.18	70	3.62
4.0	32.34	8.12	25.19	79	2.42
5.0	32.33	8.13	25.18	72	3.27
6.0	32.33	8.12	25.18	79	2.31
7.0	32.34	8.10	25.20	81	2.06
8.0	32.34	8.07	25.20	88	1.24
9.0	32.34	8.07	25.20	87	1.38
10.0	32.34	8.07	25.20	90	1.09
11.0	32.35	8.05	25.21	94	.64
12.0	32.35	8.05	25.21	94	.59
13.0	32.35	8.04	25.21	94	.57
14.0	32.35	8.02	25.22	94	.58
15.0	32.35	8.01	25.22	94	.58
16.0	32.37	8.01	25.23	94	.57
17.0	32.37	8.02	25.23	95	.56
18.0	32.39	8.03	25.24	95	.56
19.0	32.39	8.01	25.25	95	.56
20.0	32.41	7.83	25.29	93	.70
21.0	32.43	7.74	25.32	92	.84
22.0	32.43	7.74	25.32	89	1.13



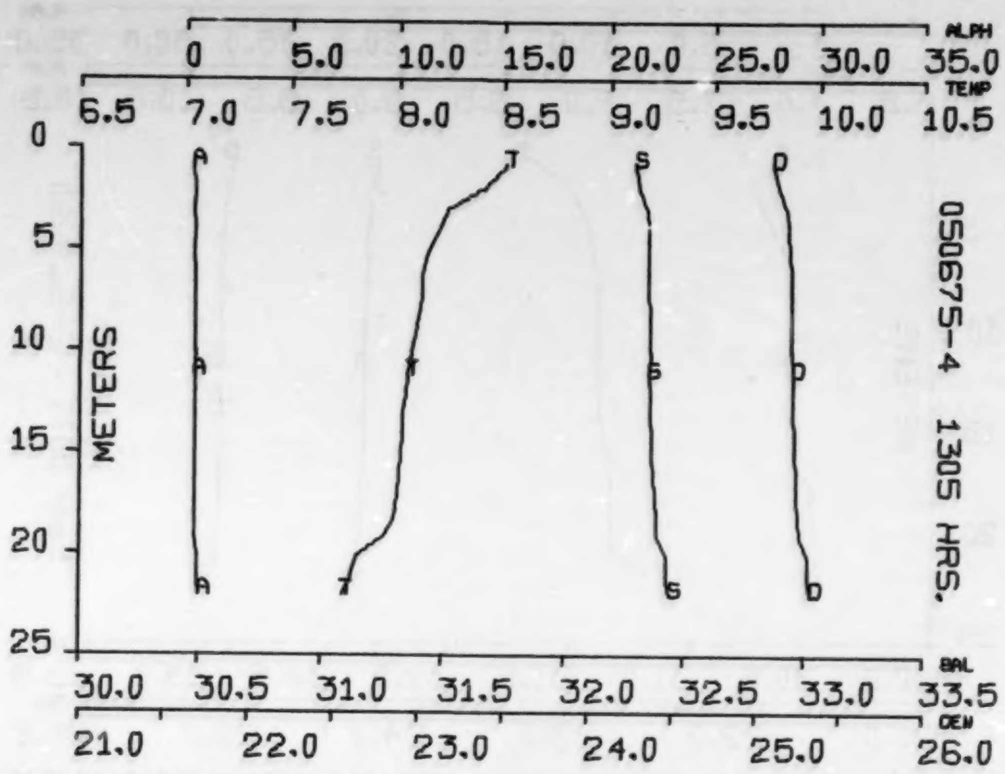
STATION 050675-2 1030 HRS.
AT DUMPSITE 36 MINUTES AFTER SLUDGE DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	32.37	8.20	25.20	82	1.93
1.0	32.35	8.21	25.19	85	1.58
2.0	32.33	8.22	25.17	88	1.23
3.0	32.34	8.16	25.19	93	.75
4.0	32.36	8.11	25.21	94	.59
5.0	32.36	8.10	25.21	95	.56
6.0	32.36	8.09	25.21	94	.57
7.0	32.36	8.08	25.21	94	.57
8.0	32.35	8.07	25.21	94	.58
9.0	32.36	8.07	25.22	95	.56
10.0	32.36	8.06	25.22	94	.58
11.0	32.36	8.07	25.22	94	.58
12.0	32.36	8.06	25.22	94	.59
13.0	32.36	8.06	25.22	94	.57
14.0	32.36	8.05	25.22	94	.58
15.0	32.36	8.04	25.22	95	.56
16.0	32.36	8.04	25.22	94	.58
17.0	32.37	8.03	25.23	94	.57
18.0	32.37	8.01	25.24	95	.56
19.0	32.39	7.98	25.25	94	.67
20.0	32.40	7.95	25.26	92	.86
21.0	32.41	7.87	25.29	90	1.02
22.0	32.44	7.81	25.32	90	1.07



STATION 050675-3 1100 HRS.
AT DUMPSITE 66 MINUTES AFTER SLUDGE DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	32.26	8.56	25.07	95	.34
1.0	32.28	8.41	25.10	84	1.73
2.0	32.29	8.25	25.14	73	3.13
3.0	32.31	8.17	25.16	73	3.17
4.0	32.32	8.13	25.18	77	2.64
5.0	32.33	8.10	25.18	80	2.28
6.0	32.33	8.08	25.19	84	1.76
7.0	32.33	8.07	25.19	85	1.65
8.0	32.34	8.07	25.20	87	1.41
9.0	32.34	8.06	25.20	86	1.52
10.0	32.34	8.06	25.20	85	1.65
11.0	32.34	8.06	25.20	83	1.87
12.0	32.34	8.06	25.20	86	1.52
13.0	32.34	8.06	25.20	83	1.87
14.0	32.35	8.05	25.21	86	1.57
15.0	32.35	8.04	25.21	87	1.34
16.0	32.35	8.03	25.21	86	1.46
17.0	32.36	8.02	25.22	91	.92
18.0	32.36	8.01	25.22	94	.67
19.0	32.36	8.01	25.23	94	.64
20.0	32.38	8.02	25.23	95	.48
21.0	32.36	7.93	25.24	95	.50



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*                                                             *
*    STATION  050675-4    1305  HRS.                          *
*    AT DUMPSITE 191 MINUTES AFTER SLUDGE DISCHARGE           *
*                                                             *
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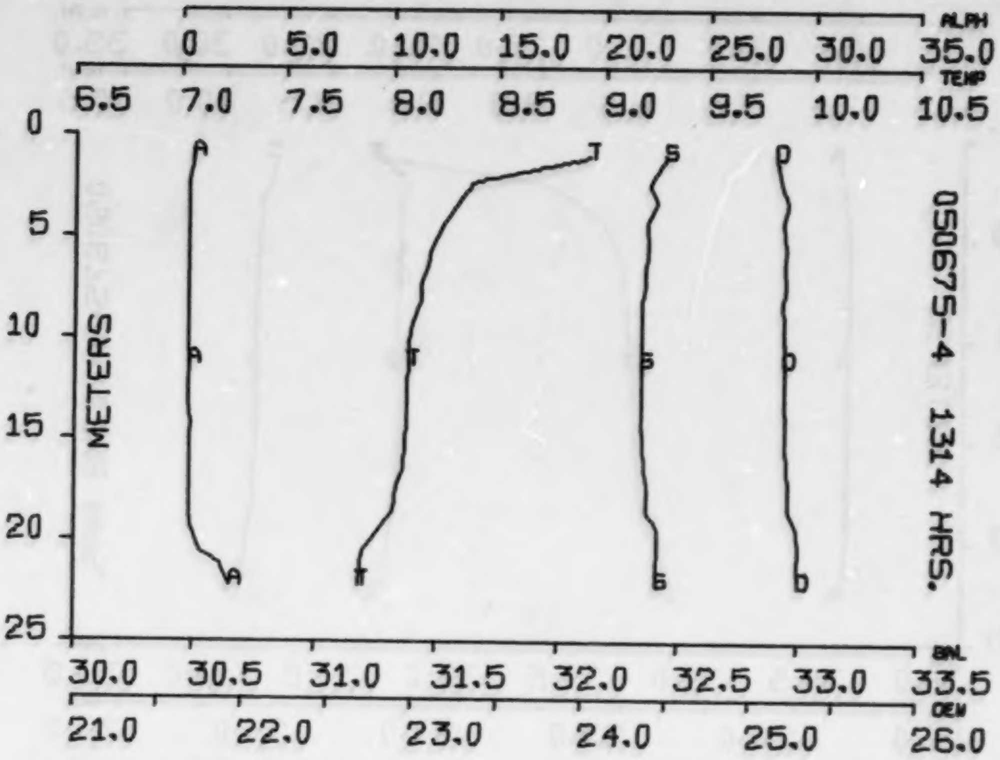
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	32.29	8.58	25.08	97	.31
1.0	32.30	8.49	25.11	96	.36
2.0	32.31	8.39	25.13	96	.41
3.0	32.35	8.23	25.18	96	.39
4.0	32.35	8.19	25.19	96	.42
5.0	32.35	8.13	25.20	96	.39
6.0	32.35	8.11	25.20	96	.40
7.0	32.35	8.11	25.21	96	.41
8.0	32.36	8.10	25.21	96	.41
9.0	32.36	8.08	25.21	96	.40
10.0	32.36	8.06	25.21	96	.40
11.0	32.36	8.05	25.21	96	.44
12.0	32.36	8.04	25.22	96	.42
13.0	32.36	8.02	25.22	96	.41
14.0	32.37	8.02	25.23	96	.42
15.0	32.37	8.01	25.23	96	.43
16.0	32.37	8.01	25.23	96	.42
17.0	32.38	8.00	25.24	96	.43
18.0	32.39	7.98	25.25	96	.43
19.0	32.39	7.94	25.26	95	.47
20.0	32.43	7.81	25.30	94	.59
21.0	32.43	7.78	25.31	94	.61



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*******************************************************
*                                                     *
*    STATION  050675-4   1314  HRS.                   *
*    AT DUMPSITE 200 MINUTES AFTER SLUDGE DISCHARGE   *
*                                                     *
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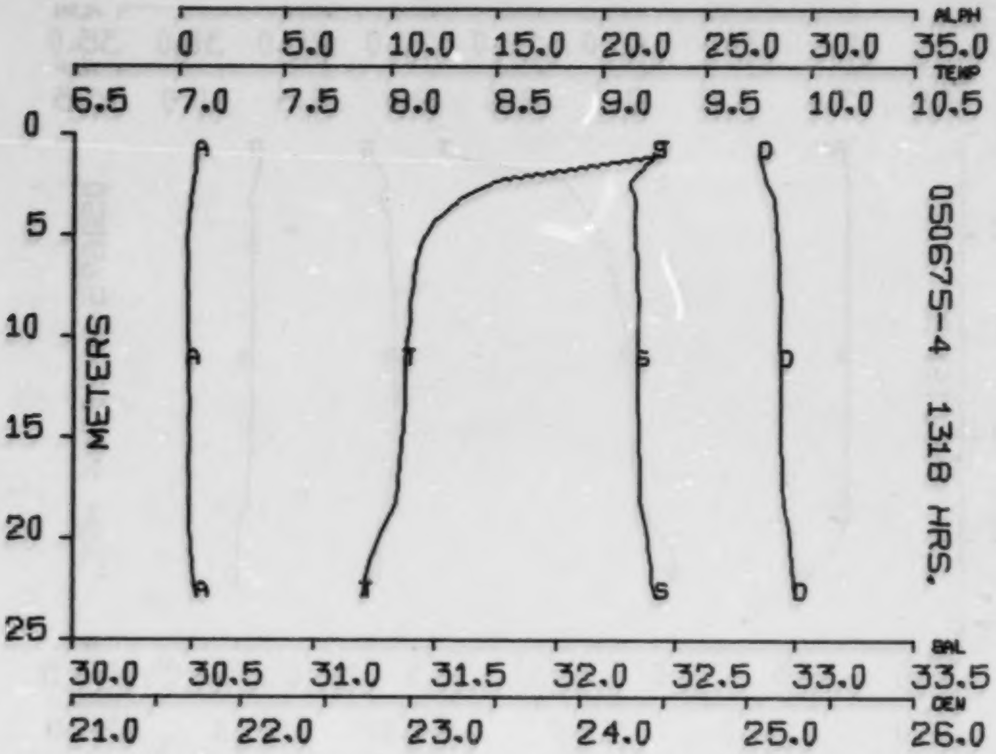
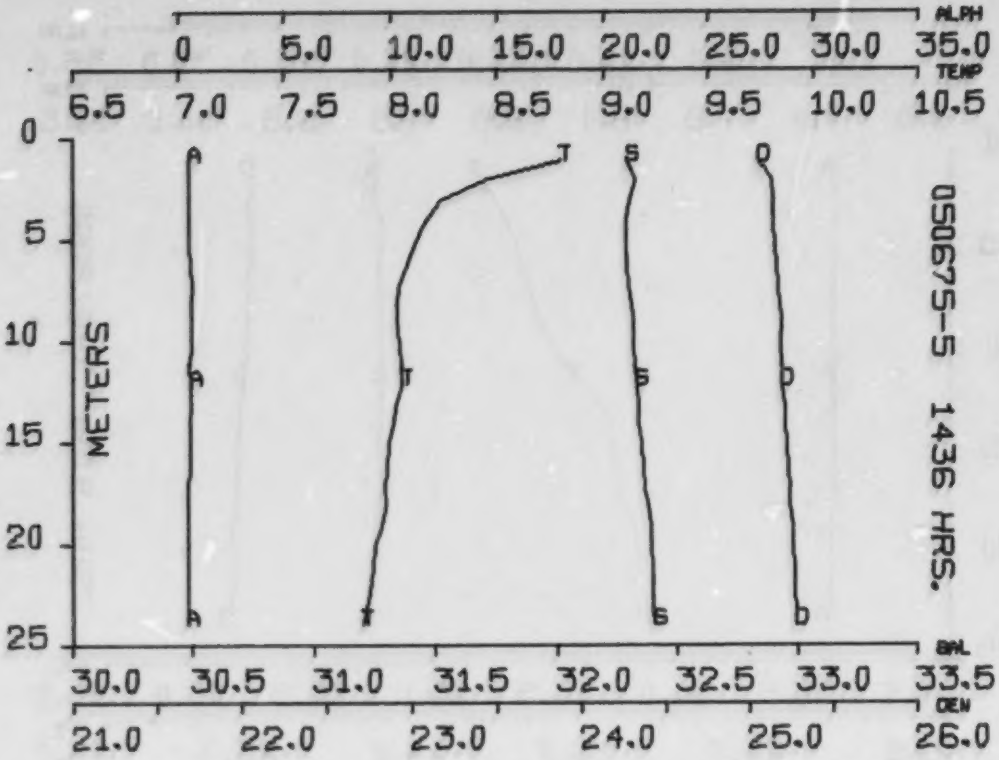
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	32.50	9.34	25.13	93	.77
1.0	32.44	8.91	25.15	94	.59
2.0	32.39	8.49	25.17	96	.41
3.0	32.40	8.32	25.21	96	.36
4.0	32.37	8.25	25.20	97	.35
5.0	32.37	8.20	25.20	97	.35
6.0	32.36	8.17	25.20	97	.35
7.0	32.36	8.14	25.20	97	.35
8.0	32.34	8.13	25.19	97	.34
9.0	32.35	8.10	25.20	96	.37
10.0	32.35	8.08	25.20	96	.38
11.0	32.35	8.08	25.20	96	.40
12.0	32.34	8.07	25.20	96	.39
13.0	32.34	8.07	25.20	96	.39
14.0	32.35	8.07	25.21	95	.53
15.0	32.35	8.06	25.21	96	.42
16.0	32.36	8.05	25.22	96	.42
17.0	32.37	8.03	25.23	96	.41
18.0	32.37	8.01	25.23	96	.41
19.0	32.40	7.97	25.26	96	.46
20.0	32.42	7.89	25.28	92	.80
21.0	32.41	7.85	25.28	84	1.71
22.0	32.41	7.84	25.29	79	2.39



STATION 050675-4 1318 HRS.
AT DUMPSITE 204 MINUTES AFTER SLUDGE DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	32.49	9.87	25.04	92	.88
1.0	32.41	9.27	25.07	92	.81
2.0	32.32	8.67	25.10	93	.73
3.0	32.32	8.36	25.14	94	.58
4.0	32.32	8.23	25.16	96	.45
5.0	32.33	8.16	25.18	96	.39
6.0	32.34	8.12	25.19	96	.40
7.0	32.34	8.11	25.19	96	.40
8.0	32.34	8.10	25.20	96	.42
9.0	32.34	8.09	25.19	96	.45
10.0	32.33	8.08	25.19	96	.43
11.0	32.34	8.07	25.20	96	.43
12.0	32.34	8.07	25.20	96	.42
13.0	32.34	8.07	25.20	95	.49
14.0	32.34	8.06	25.20	95	.49
15.0	32.34	8.06	25.20	95	.49
16.0	32.35	8.05	25.21	96	.44
17.0	32.35	8.03	25.21	95	.48
18.0	32.35	8.03	25.21	95	.51
19.0	32.37	7.98	25.24	95	.53
20.0	32.38	7.94	25.25	94	.57
21.0	32.39	7.90	25.27	94	.64
22.0	32.40	7.88	25.28	93	.73



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*                                                      *
*    STATION  050675-5   1436  HRS.                    *
*    OUT OF DUMP AREA                                  *
*                                                      *
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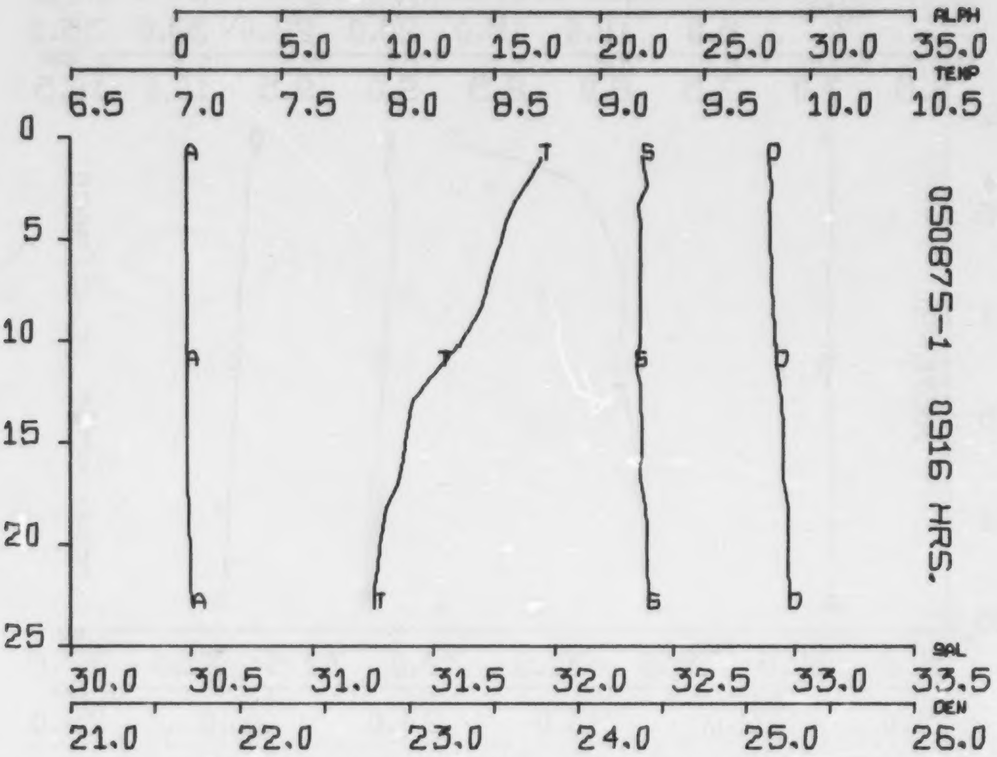
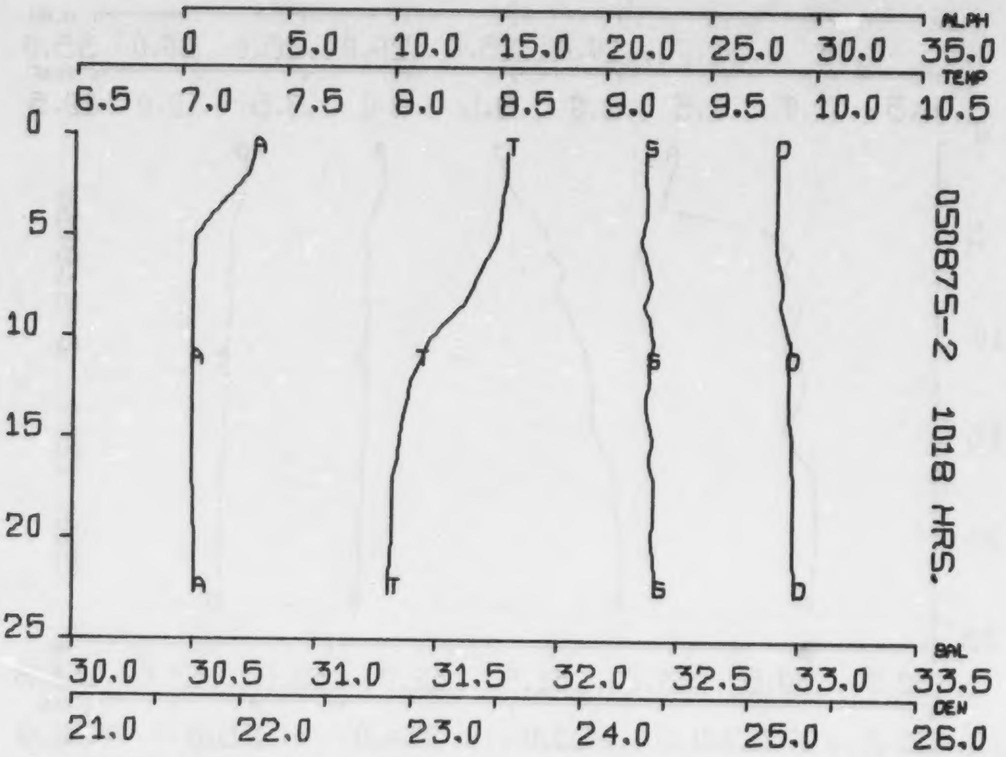
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	32.24	9.17	24.96	95	.48
1.0	32.28	8.81	25.04	95	.50
2.0	32.32	8.46	25.13	95	.51
3.0	32.29	8.24	25.14	95	.54
4.0	32.29	8.16	25.14	95	.56
5.0	32.28	8.12	25.15	95	.56
6.0	32.28	8.08	25.15	94	.60
7.0	32.29	8.05	25.17	94	.64
8.0	32.31	8.03	25.18	94	.60
9.0	32.32	8.03	25.19	94	.57
10.0	32.32	8.04	25.18	94	.57
11.0	32.32	8.05	25.19	95	.56
12.0	32.33	8.05	25.19	95	.56
13.0	32.34	8.03	25.20	94	.57
14.0	32.34	8.01	25.21	95	.56
15.0	32.35	7.99	25.22	95	.52
16.0	32.36	7.98	25.23	95	.51
17.0	32.37	7.97	25.23	95	.48
18.0	32.38	7.98	25.24	95	.48
19.0	32.39	7.95	25.25	95	.47
20.0	32.39	7.93	25.26	96	.44
21.0	32.40	7.91	25.27	95	.46
22.0	32.40	7.90	25.27	96	.44
23.0	32.40	7.89	25.28	96	.45



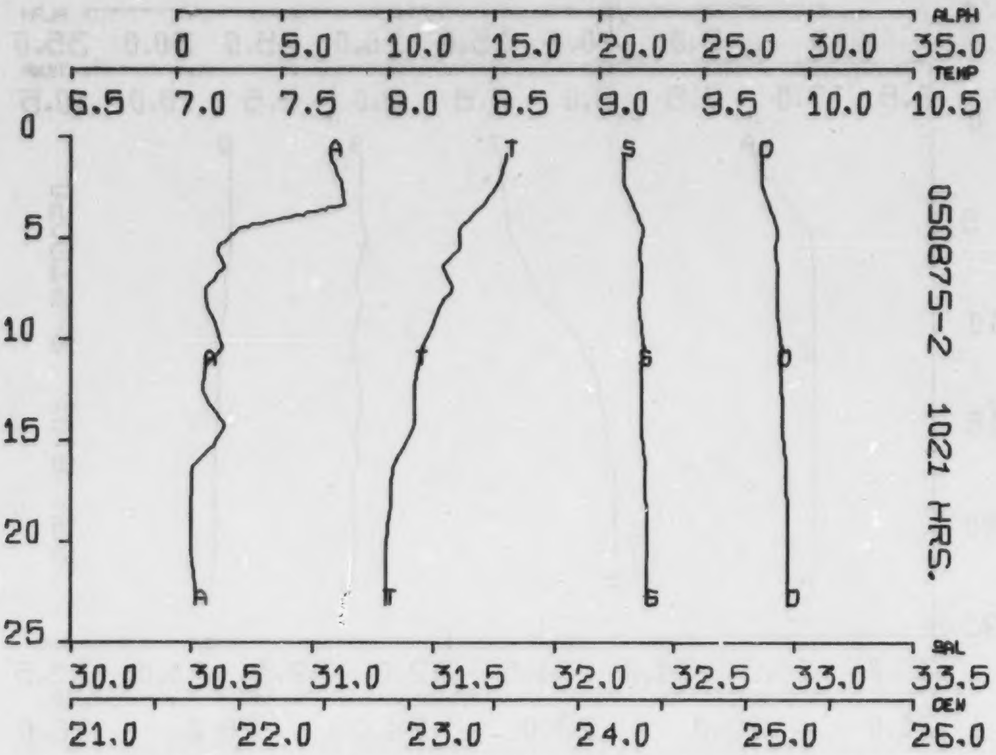
STATION 050875-1 0916 HRS.
AT DUMPSITE BEFORE SLUDGE DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	32.35	8.77	25.11	96	.43
1.0	32.37	8.71	25.13	96	.45
2.0	32.38	8.65	25.15	95	.46
3.0	32.35	8.59	25.13	96	.46
4.0	32.36	8.55	25.14	95	.47
5.0	32.35	8.52	25.14	95	.46
6.0	32.36	8.49	25.15	95	.48
7.0	32.35	8.46	25.15	95	.48
8.0	32.36	8.43	25.16	95	.49
9.0	32.36	8.39	25.17	95	.48
10.0	32.35	8.33	25.17	95	.47
11.0	32.34	8.25	25.17	95	.48
12.0	32.36	8.17	25.20	95	.46
13.0	32.36	8.10	25.21	95	.47
14.0	32.36	8.09	25.21	95	.46
15.0	32.36	8.07	25.22	95	.47
16.0	32.36	8.06	25.21	95	.48
17.0	32.36	8.03	25.22	95	.53
18.0	32.38	7.99	25.24	94	.59
19.0	32.38	7.96	25.25	94	.62
20.0	32.38	7.95	25.25	94	.65
21.0	32.38	7.94	25.25	94	.67
22.0	32.39	7.93	25.26	93	.70
23.0	32.39	7.93	25.26	92	.81



STATION 050875-2 1018 HRS.
AT DUMPSITE 9 MINUTES AFTER SLUDGE DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	32.37	8.53	25.15	69	3.70
1.0	32.36	8.53	25.15	71	3.36
2.0	32.36	8.53	25.15	74	2.99
3.0	32.36	8.51	25.15	80	2.17
4.0	32.36	8.49	25.15	87	1.36
5.0	32.34	8.48	25.14	93	.70
6.0	32.36	8.44	25.16	94	.57
7.0	32.38	8.39	25.18	95	.55
8.0	32.36	8.34	25.18	95	.56
9.0	32.38	8.26	25.20	95	.56
10.0	32.39	8.17	25.23	95	.53
11.0	32.38	8.13	25.22	95	.53
12.0	32.38	8.07	25.23	95	.51
13.0	32.36	8.06	25.22	95	.53
14.0	32.37	8.04	25.23	94	.57
15.0	32.39	8.03	25.25	94	.59
16.0	32.38	8.02	25.24	94	.63
17.0	32.40	8.00	25.26	94	.64
18.0	32.40	7.99	25.26	94	.65
19.0	32.40	8.00	25.25	93	.68
20.0	32.39	7.99	25.25	93	.74
21.0	32.40	7.99	25.26	93	.72
22.0	32.41	7.98	25.27	93	.77



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*                                                        *
*    STATION  050875-2     1021   HRS.                   *
*    AT DUMPSITE 12 MINUTES AFTER SLUDGE DISCHARGE       *
*                                                        *
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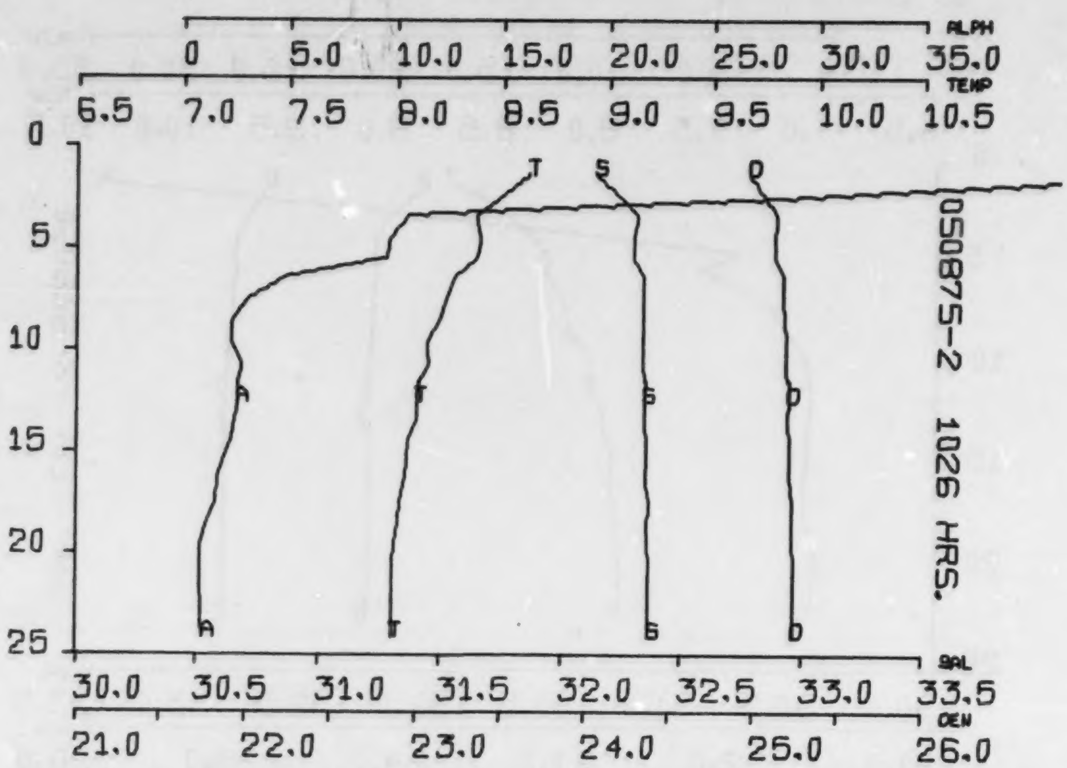
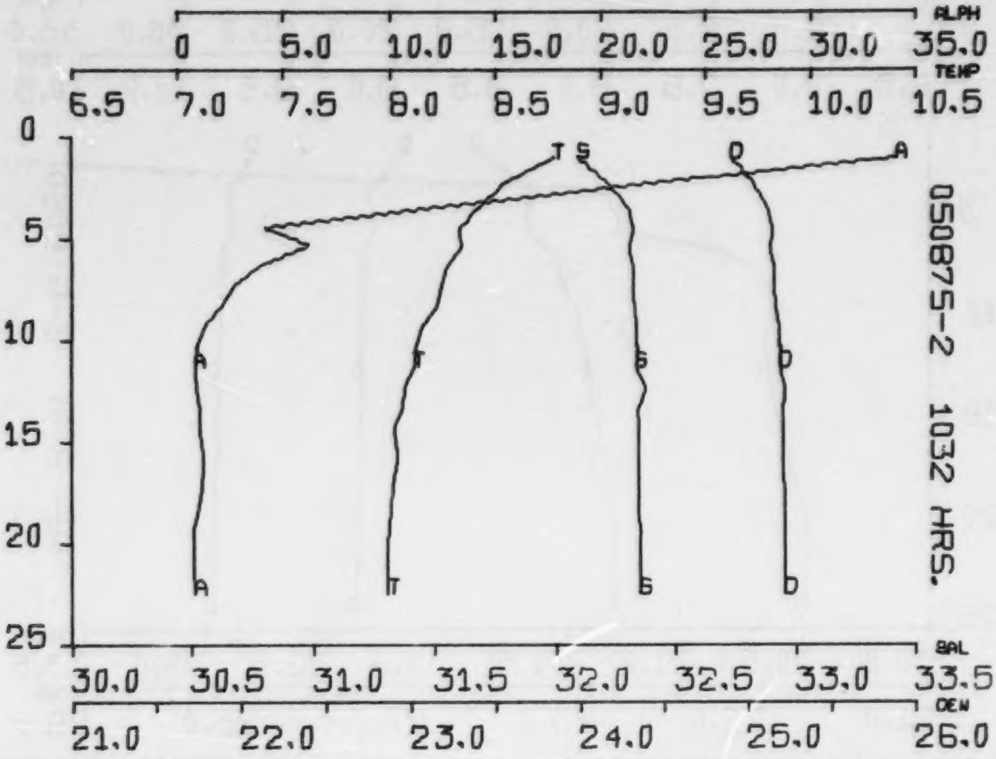
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	32.29	8.59	25.08	50	6.85
1.0	32.29	8.56	25.09	48	7.27
2.0	32.29	8.52	25.09	46	7.69
3.0	32.31	8.47	25.12	45	7.89
4.0	32.35	8.38	25.16	62	5.14
5.0	32.36	8.34	25.18	79	2.32
6.0	32.36	8.28	25.19	81	2.10
7.0	32.36	8.29	25.18	85	1.64
8.0	32.35	8.26	25.18	87	1.42
9.0	32.36	8.21	25.19	84	1.75
10.0	32.37	8.17	25.21	81	2.08
11.0	32.36	8.14	25.21	86	1.52
12.0	32.36	8.12	25.21	89	1.19
13.0	32.37	8.11	25.21	86	1.46
14.0	32.36	8.12	25.21	81	2.14
15.0	32.37	8.08	25.22	84	1.75
16.0	32.38	8.02	25.23	92	.89
17.0	32.38	8.00	25.24	93	.68
18.0	32.38	8.00	25.24	94	.64
19.0	32.39	7.99	25.25	94	.64
20.0	32.39	7.99	25.25	93	.67
21.0	32.38	7.98	25.25	93	.77
22.0	32.38	7.98	25.24	92	.88
23.0	32.39	7.98	25.25	91	.92



STATION 050875-2 1026 HRS.

AT DUMPSITE 17 MINUTES AFTER SLUDGE DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	32.02	8.78	24.84	-4	66.36
1.0	32.11	8.66	24.93	-0	51.23
2.0	32.20	8.54	25.02	4	36.09
3.0	32.28	8.42	25.10	23	18.02
4.0	32.30	8.39	25.12	37	10.02
5.0	32.30	8.36	25.13	43	8.54
6.0	32.32	8.31	25.15	53	6.48
7.0	32.33	8.25	25.16	67	4.09
8.0	32.34	8.21	25.18	77	2.57
9.0	32.34	8.17	25.18	80	2.22
10.0	32.34	8.15	25.19	78	2.49
11.0	32.34	8.13	25.19	77	2.63
12.0	32.34	8.10	25.20	78	2.48
13.0	32.34	8.09	25.20	78	2.43
14.0	32.35	8.06	25.21	80	2.28
15.0	32.35	8.05	25.21	82	1.99
16.0	32.35	8.03	25.21	85	1.68
17.0	32.36	8.02	25.22	86	1.55
18.0	32.36	8.01	25.22	88	1.24
19.0	32.36	7.99	25.22	91	.89
20.0	32.36	7.98	25.23	93	.76
21.0	32.36	7.98	25.23	92	.78
22.0	32.36	7.98	25.23	91	.89
23.0	32.36	7.98	25.23	91	.94



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***********************************************************
*                                                         *
*    STATION  050875-2   1032  HRS.                       *
*    AT DUMPSITE 23 MINUTES AFTER SLUDGE DISCHARGE        *
*                                                         *
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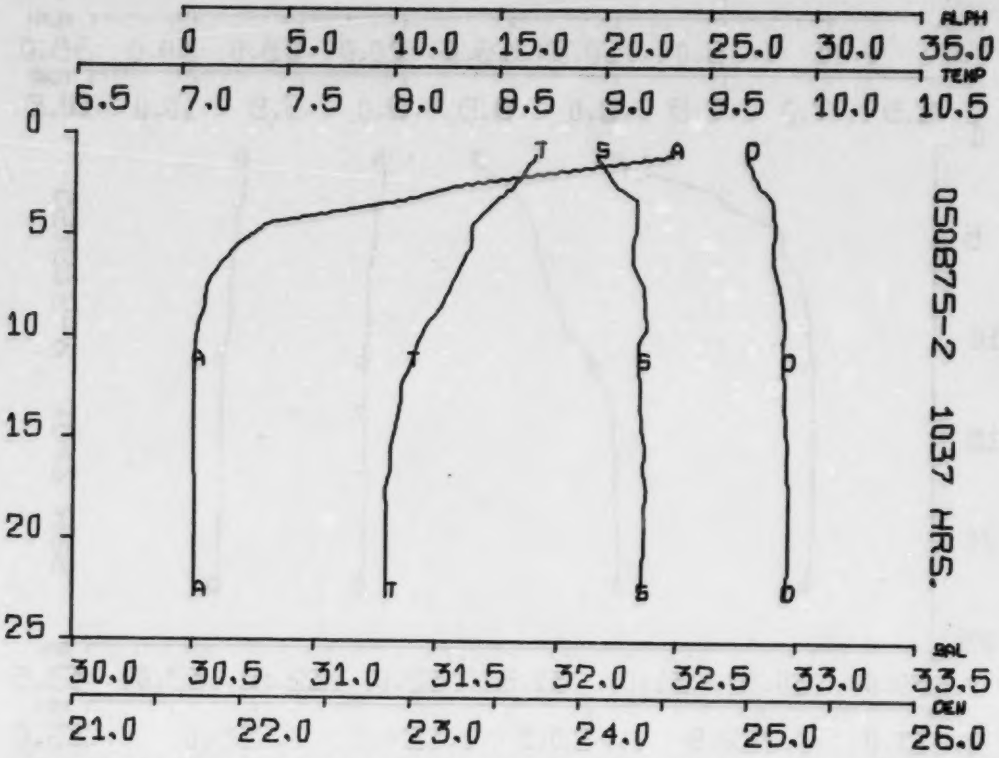
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	32.00	8.97	24.80	-2	43.53
1.0	32.09	8.78	24.90	3	34.21
2.0	32.19	8.58	25.01	9	24.90
3.0	32.27	8.45	25.09	23	15.78
4.0	32.32	8.36	25.14	51	7.45
5.0	32.31	8.33	25.14	58	5.48
6.0	32.32	8.29	25.15	64	4.57
7.0	32.32	8.24	25.16	75	2.90
8.0	32.33	8.22	25.17	81	2.11
9.0	32.34	8.16	25.18	87	1.42
10.0	32.34	8.12	25.19	91	.91
11.0	32.33	8.11	25.19	92	.80
12.0	32.36	8.07	25.21	92	.87
13.0	32.35	8.05	25.21	90	1.01
14.0	32.35	8.02	25.21	90	1.00
15.0	32.34	8.03	25.20	89	1.15
16.0	32.33	8.02	25.20	89	1.15
17.0	32.34	8.01	25.21	90	1.10
18.0	32.34	8.00	25.21	91	.99
19.0	32.35	7.99	25.22	93	.75
20.0	32.35	7.98	25.22	93	.77
21.0	32.35	7.98	25.22	92	.79
22.0	32.35	7.99	25.22	92	.84



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*                                                           *
*    STATION  050875-2   1037  HRS.                         *
*    AT DUMPSITE 28 MINUTES AFTER SLUDGE DISCHARGE          *
*                                                           *
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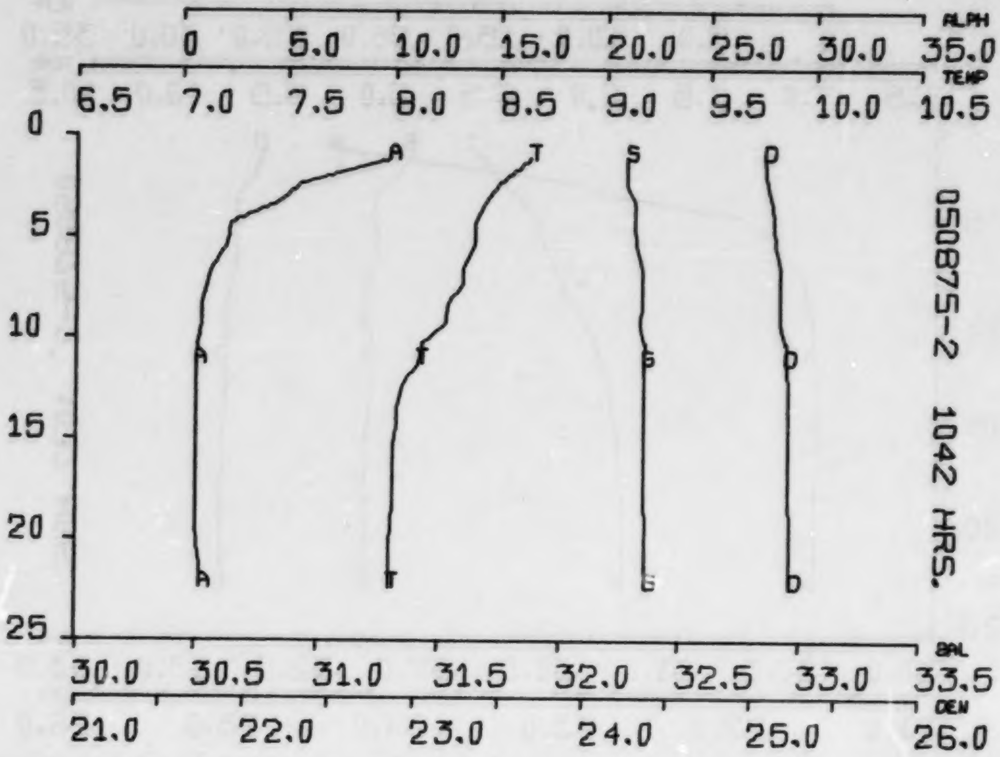
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	32.10	8.74	24.91	-2	29.96
1.0	32.16	8.67	24.97	10	23.14
2.0	32.21	8.60	25.02	22	16.31
3.0	32.31	8.50	25.11	32	11.32
4.0	32.33	8.40	25.14	56	6.32
5.0	32.31	8.37	25.13	73	3.20
6.0	32.31	8.33	25.14	80	2.19
7.0	32.34	8.28	25.17	87	1.44
8.0	32.36	8.24	25.19	90	1.11
9.0	32.37	8.18	25.20	92	.89
10.0	32.34	8.12	25.19	94	.67
11.0	32.34	8.09	25.20	94	.61
12.0	32.35	8.05	25.21	94	.60
13.0	32.35	8.03	25.21	94	.63
14.0	32.35	8.02	25.21	94	.63
15.0	32.36	8.00	25.23	94	.65
16.0	32.36	7.99	25.22	94	.66
17.0	32.36	7.97	25.23	93	.71
18.0	32.36	7.97	25.23	93	.76
19.0	32.36	7.97	25.23	93	.74
20.0	32.36	7.97	25.23	93	.70
21.0	32.36	7.98	25.23	93	.72
22.0	32.35	7.98	25.22	93	.70



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*****************************************************************
*                                                               *
*    STATION  050875-2   1042  HRS.                             *
*    AT DUMPSITE 33 MINUTES AFTER SLUDGE DISCHARGE              *
*                                                               *
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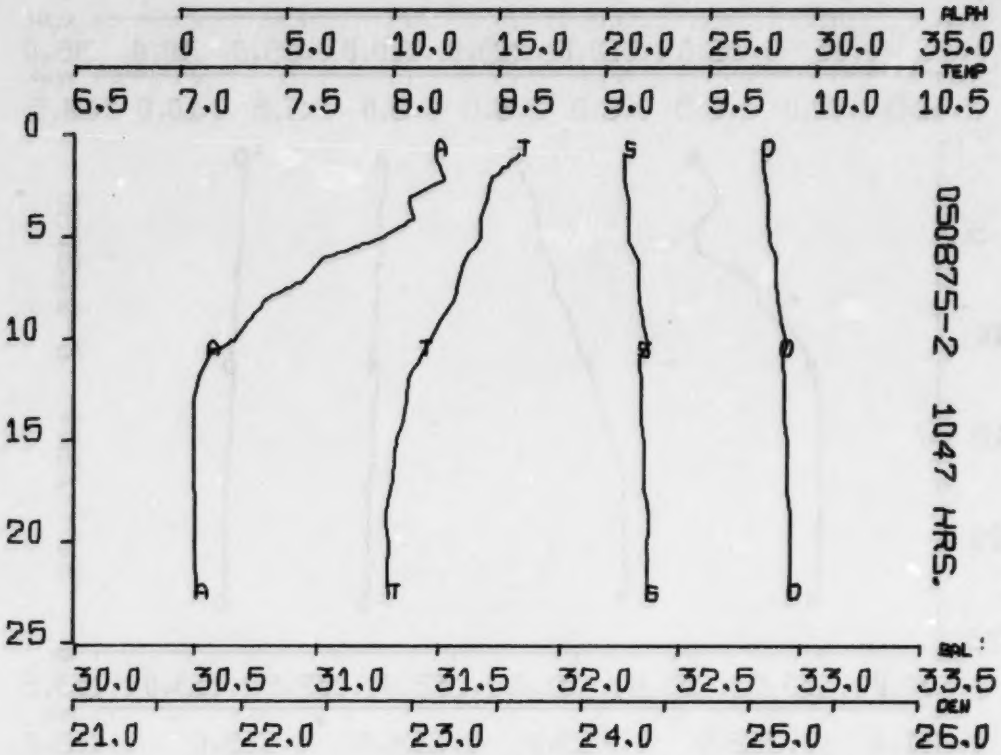
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	32.28	8.77	25.05	21	13.35
1.0	32.28	8.65	25.07	37	10.00
2.0	32.27	8.53	25.08	52	6.64
3.0	32.30	8.43	25.11	62	4.72
4.0	32.31	8.38	25.13	76	2.76
5.0	32.31	8.37	25.14	81	2.08
6.0	32.33	8.34	25.15	85	1.63
7.0	32.34	8.32	25.16	89	1.18
8.0	32.34	8.26	25.17	91	.92
9.0	32.33	8.24	25.17	92	.83
10.0	32.35	8.15	25.19	93	.69
11.0	32.35	8.11	25.20	94	.62
12.0	32.35	8.05	25.21	94	.60
13.0	32.35	8.02	25.22	94	.60
14.0	32.35	8.00	25.22	94	.60
15.0	32.35	7.99	25.22	94	.61
16.0	32.35	7.99	25.22	94	.61
17.0	32.35	7.99	25.22	94	.62
18.0	32.35	7.99	25.22	93	.67
19.0	32.36	7.98	25.23	93	.70
20.0	32.36	7.98	25.23	93	.74
21.0	32.35	7.98	25.22	91	.90
22.0	32.35	7.97	25.23	91	.89



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*                                                         *
*    STATION  050875-2   1047  HRS.                       *
*    AT DUMPSITE 38 MINUTES AFTER SLUDGE DISCHARGE        *
*                                                         *
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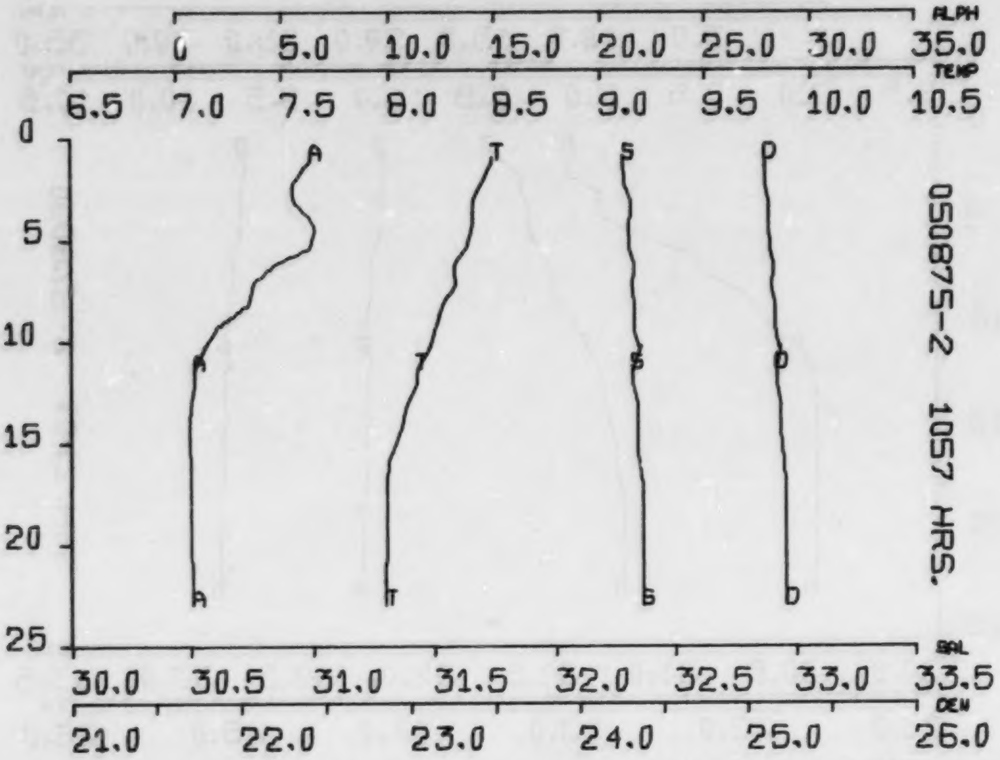
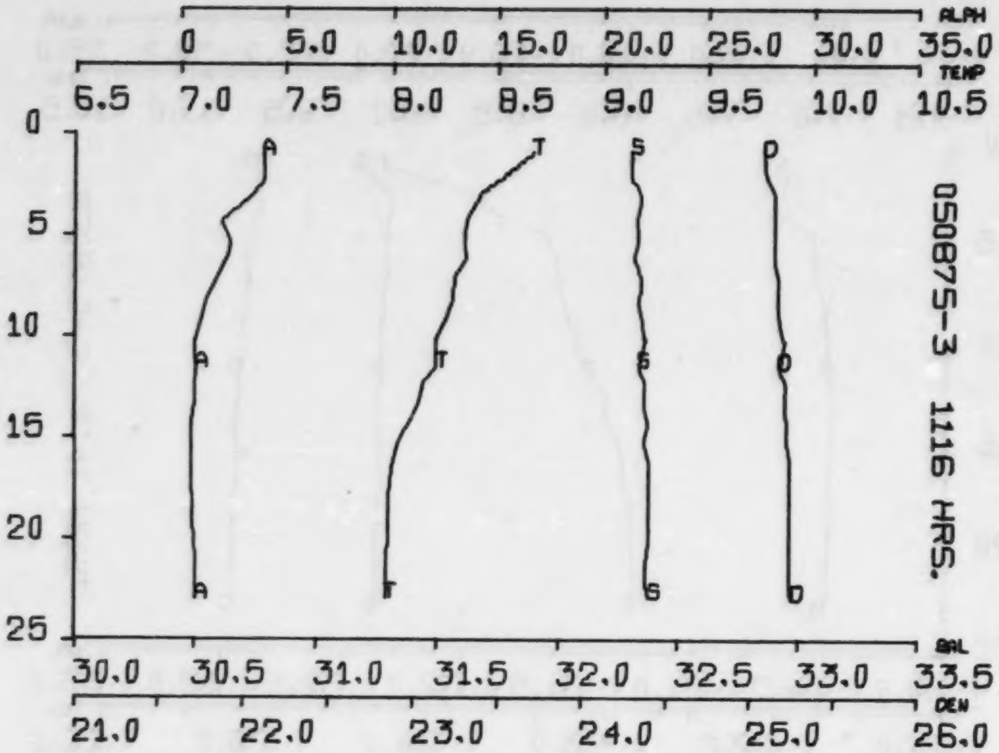
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	32.26	8.68	25.05	31	11.66
1.0	32.26	8.57	25.06	30	12.02
2.0	32.26	8.46	25.08	29	12.39
3.0	32.28	8.44	25.10	34	10.71
4.0	32.28	8.40	25.10	33	11.00
5.0	32.28	8.40	25.11	39	9.39
6.0	32.32	8.33	25.15	51	6.78
7.0	32.32	8.30	25.15	56	5.77
8.0	32.33	8.28	25.16	66	4.11
9.0	32.34	8.22	25.18	72	3.22
10.0	32.36	8.17	25.20	78	2.47
11.0	32.33	8.12	25.18	88	1.25
12.0	32.34	8.07	25.20	92	.84
13.0	32.33	8.06	25.19	94	.63
14.0	32.34	8.04	25.20	94	.64
15.0	32.35	8.01	25.22	93	.68
16.0	32.35	8.00	25.22	94	.66
17.0	32.34	7.99	25.21	93	.68
18.0	32.36	7.97	25.23	93	.75
19.0	32.37	7.97	25.24	93	.71
20.0	32.36	7.99	25.23	93	.71
21.0	32.37	7.97	25.23	93	.76
22.0	32.36	7.98	25.23	92	.81



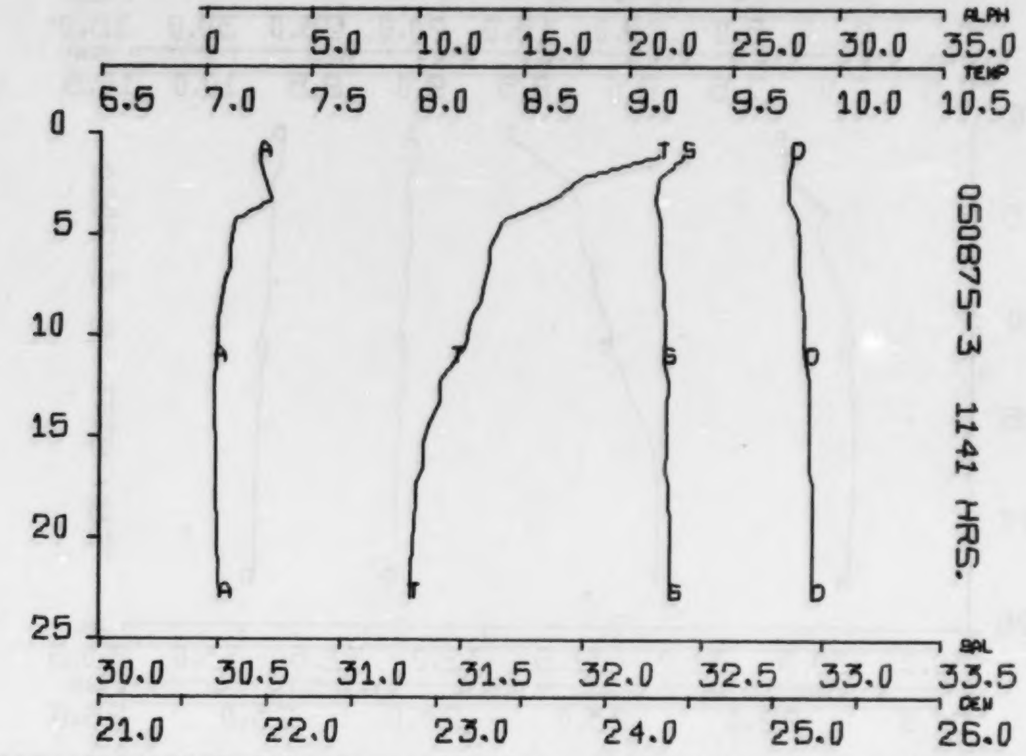
STATION 050875-2 1057 HRS.
AT DUMPSITE 48 MINUTES AFTER SLUDGE DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	32.28	8.53	25.09	49	7.12
1.0	32.28	8.48	25.10	53	6.33
2.0	32.29	8.44	25.10	58	5.53
3.0	32.31	8.39	25.13	58	5.51
4.0	32.31	8.39	25.13	53	6.31
5.0	32.31	8.37	25.13	53	6.29
6.0	32.33	8.31	25.15	62	4.85
7.0	32.32	8.31	25.15	69	3.68
8.0	32.33	8.26	25.16	72	3.33
9.0	32.33	8.22	25.17	80	2.22
10.0	32.34	8.19	25.18	87	1.39
11.0	32.33	8.14	25.18	91	.91
12.0	32.33	8.13	25.18	93	.78
13.0	32.34	8.08	25.20	94	.60
14.0	32.34	8.06	25.20	95	.56
15.0	32.34	8.02	25.21	94	.59
16.0	32.35	7.99	25.22	94	.66
17.0	32.37	7.98	25.23	94	.59
18.0	32.36	7.99	25.23	94	.62
19.0	32.36	7.98	25.23	94	.66
20.0	32.36	7.98	25.23	93	.68
21.0	32.36	7.98	25.23	93	.74
22.0	32.36	7.97	25.23	93	.77



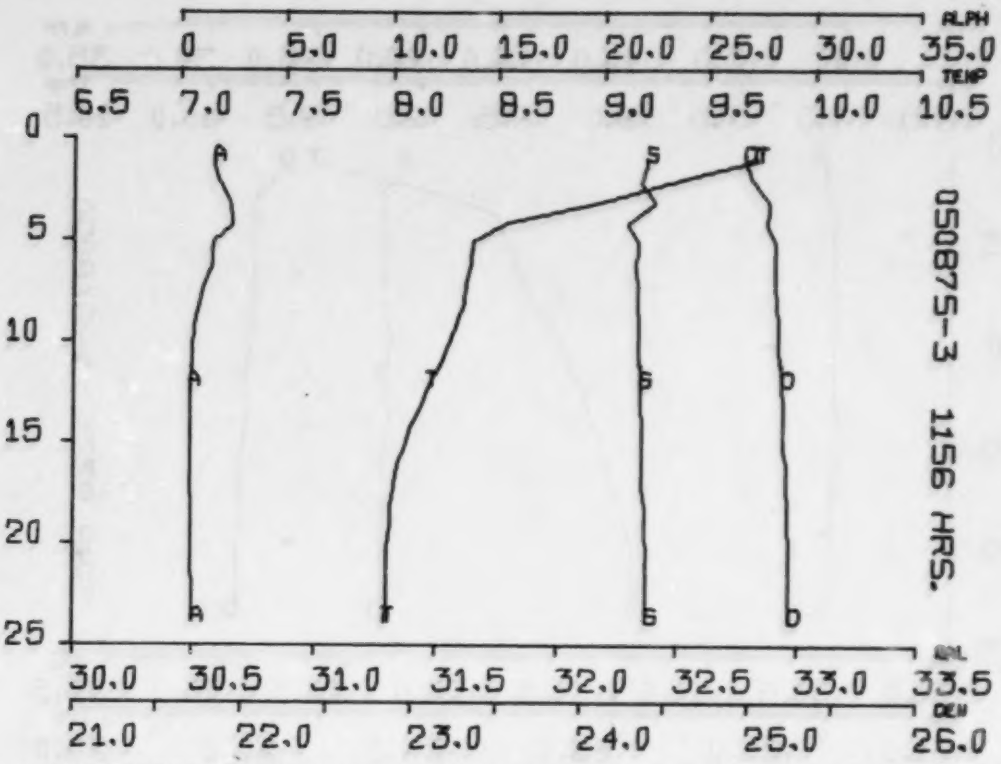
STATION 050875-3 1116 HRS.
AT DUMPSITE 65 MINUTES AFTER SLUDGE DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	32.31	8.78	25.07	68	3.79
1.0	32.30	8.66	25.08	68	3.88
2.0	32.30	8.54	25.10	67	3.97
3.0	32.34	8.41	25.15	72	3.31
4.0	32.33	8.35	25.15	81	2.13
5.0	32.33	8.33	25.15	80	2.22
6.0	32.31	8.35	25.14	81	2.11
7.0	32.34	8.29	25.17	85	1.67
8.0	32.34	8.28	25.17	89	1.17
9.0	32.35	8.25	25.18	92	.88
10.0	32.36	8.21	25.19	94	.67
11.0	32.34	8.20	25.18	93	.69
12.0	32.35	8.16	25.19	94	.65
13.0	32.35	8.12	25.20	94	.62
14.0	32.37	8.08	25.22	95	.48
15.0	32.36	8.03	25.22	95	.51
16.0	32.37	8.00	25.24	95	.55
17.0	32.37	7.98	25.24	95	.54
18.0	32.38	7.97	25.24	94	.59
19.0	32.37	7.97	25.24	94	.63
20.0	32.38	7.97	25.24	93	.68
21.0	32.36	7.96	25.23	93	.74
22.0	32.36	7.96	25.23	93	.76



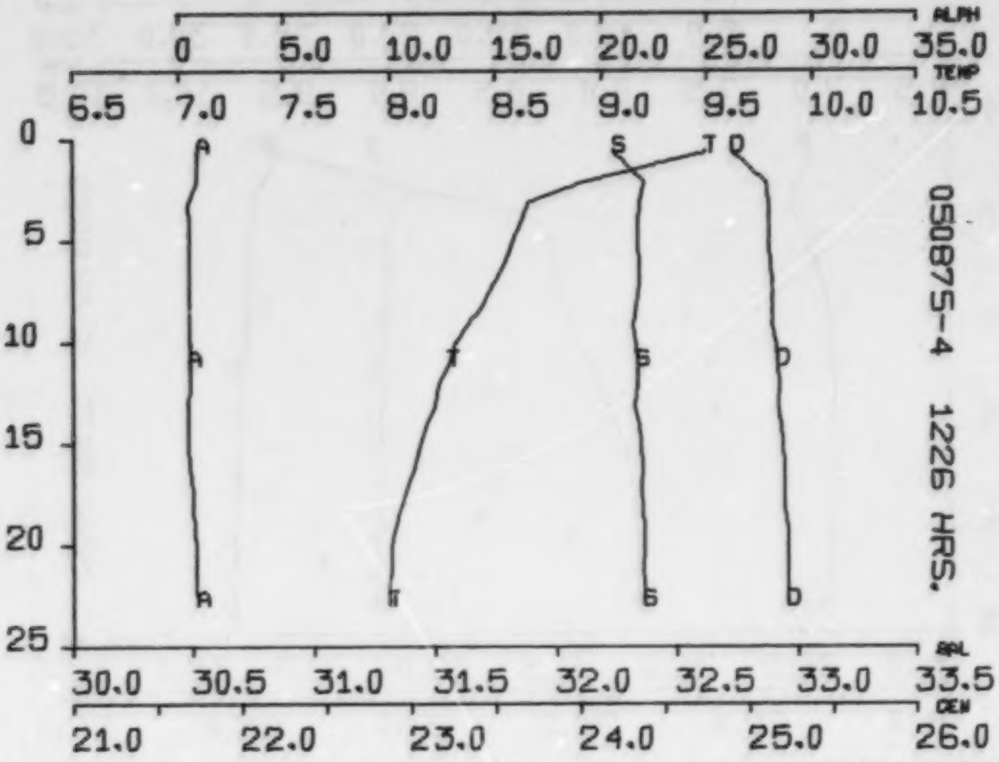
STATION 050875-3 1141 HRS.
AT DUMPSITE 90 MINUTES AFTER SLUDGE DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	32.52	9.48	25.12	80	2.27
1.0	32.42	9.16	25.10	78	2.54
2.0	32.33	8.83	25.08	76	2.80
3.0	32.30	8.66	25.08	73	3.13
4.0	32.32	8.45	25.13	84	1.73
5.0	32.32	8.36	25.15	89	1.20
6.0	32.32	8.33	25.15	89	1.12
7.0	32.33	8.32	25.16	91	.92
8.0	32.34	8.30	25.16	93	.72
9.0	32.34	8.25	25.18	95	.56
10.0	32.34	8.23	25.17	95	.54
11.0	32.34	8.18	25.18	95	.47
12.0	32.35	8.11	25.21	96	.39
13.0	32.35	8.10	25.20	96	.42
14.0	32.34	8.06	25.20	96	.45
15.0	32.35	8.03	25.21	95	.49
16.0	32.34	8.03	25.21	95	.50
17.0	32.35	8.00	25.22	95	.52
18.0	32.36	7.99	25.23	95	.55
19.0	32.36	7.98	25.23	95	.56
20.0	32.36	7.97	25.23	94	.60
21.0	32.36	7.97	25.23	94	.67
22.0	32.36	7.97	25.23	93	.67



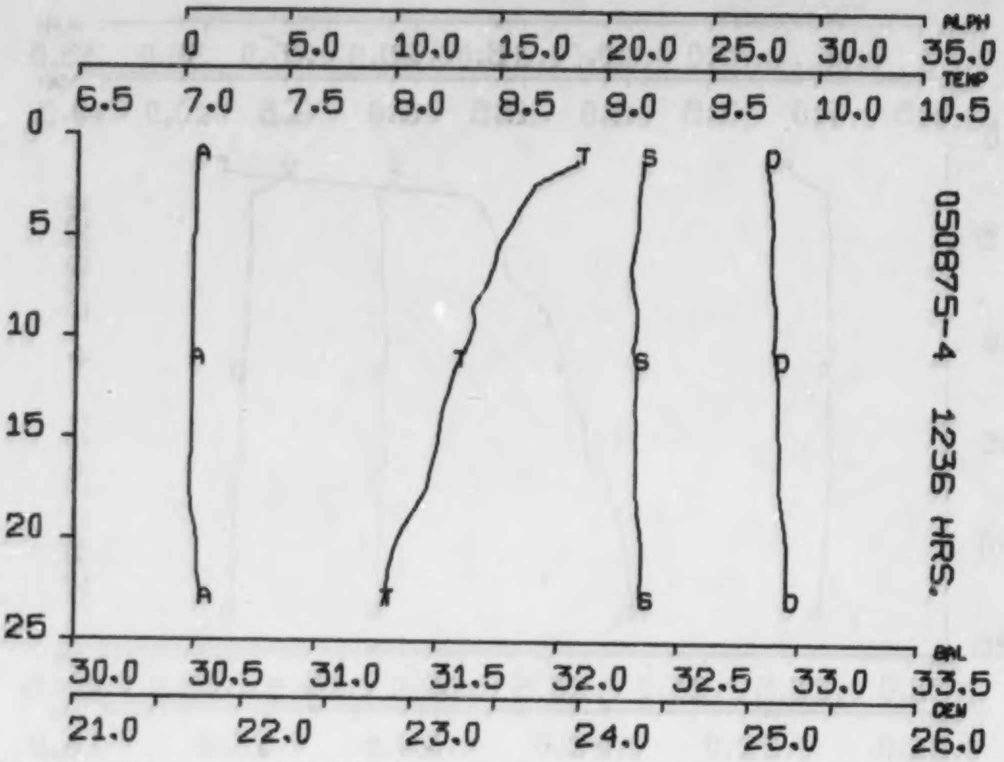
STATION 050875-3 1156 HRS.
AT DUMPSITE 105 MINUTES AFTER SLUDGE DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	32.39	10.10	24.92	88	1.28
1.0	32.37	9.75	24.96	85	1.58
2.0	32.34	9.39	25.00	83	1.88
3.0	32.39	9.02	25.10	79	2.38
4.0	32.30	8.61	25.09	78	2.49
5.0	32.33	8.38	25.14	86	1.56
6.0	32.32	8.37	25.14	86	1.50
7.0	32.33	8.35	25.15	89	1.19
8.0	32.33	8.34	25.15	92	.83
9.0	32.34	8.30	25.16	94	.66
10.0	32.33	8.26	25.17	95	.52
11.0	32.34	8.22	25.17	95	.49
12.0	32.34	8.17	25.19	96	.43
13.0	32.34	8.14	25.19	96	.41
14.0	32.35	8.09	25.20	95	.48
15.0	32.34	8.06	25.20	95	.49
16.0	32.35	8.02	25.22	95	.50
17.0	32.35	8.01	25.22	95	.53
18.0	32.36	7.99	25.23	94	.57
19.0	32.36	7.99	25.23	94	.59
20.0	32.37	7.97	25.24	94	.60
21.0	32.37	7.97	25.23	94	.59
22.0	32.37	7.97	25.24	94	.64
23.0	32.37	7.97	25.23	93	.70



STATION 050875-4 1226 HRS.
AT DUMPSITE 126 MINUTES AFTER SLUDGE DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	32.19	9.71	24.83	90	1.00
1.0	32.27	9.33	24.96	91	.92
2.0	32.36	8.96	25.08	92	.83
3.0	32.35	8.68	25.11	95	.51
4.0	32.34	8.62	25.12	95	.49
5.0	32.34	8.58	25.12	95	.51
6.0	32.34	8.54	25.13	95	.52
7.0	32.35	8.49	25.14	95	.54
8.0	32.33	8.44	25.14	95	.53
9.0	32.32	8.37	25.14	95	.53
10.0	32.33	8.31	25.16	95	.51
11.0	32.33	8.28	25.16	95	.49
12.0	32.34	8.23	25.18	95	.49
13.0	32.33	8.21	25.17	95	.46
14.0	32.35	8.17	25.19	95	.47
15.0	32.35	8.14	25.20	95	.48
16.0	32.36	8.12	25.21	95	.54
17.0	32.36	8.08	25.21	94	.64
18.0	32.36	8.06	25.21	93	.70
19.0	32.36	8.03	25.22	93	.74
20.0	32.37	8.01	25.23	92	.80
21.0	32.36	8.00	25.23	92	.85
22.0	32.36	8.00	25.23	92	.88



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**********************************************************************
*                                                                    *
*    STATION  050875-4   1236  HRS.                                  *
*    AT DUMPSITE 136 MINUTES AFTER SLUDGE DISCHARGE                  *
*                                                                    *
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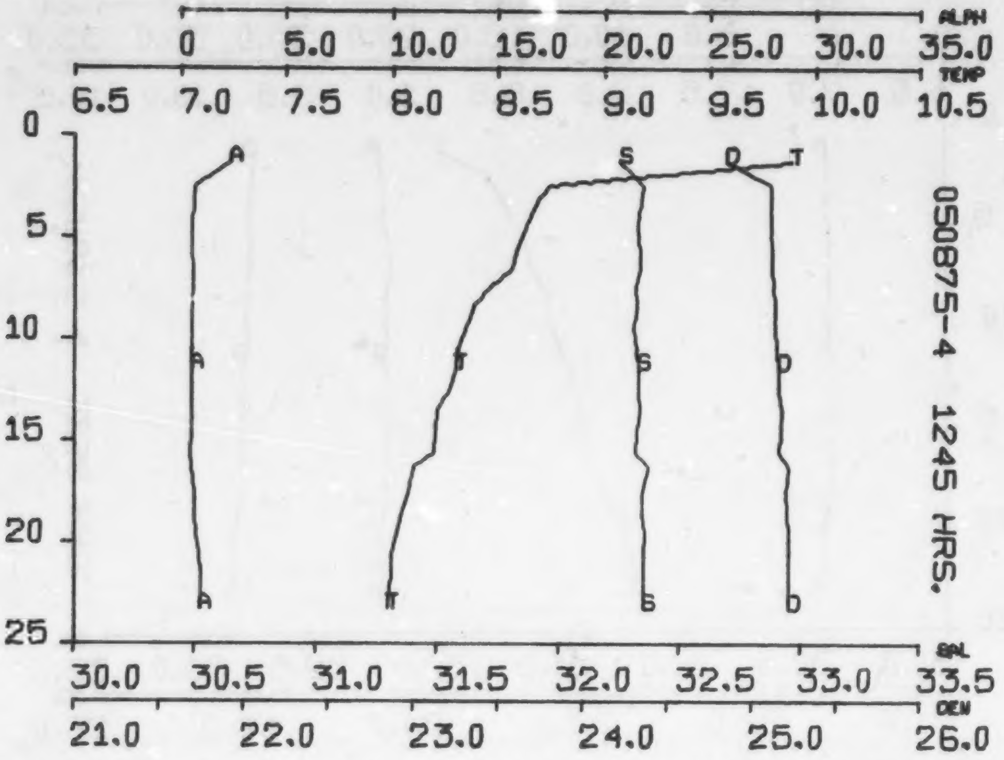
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	32.36	9.08	25.06	93	.72
1.0	32.35	8.90	25.08	94	.66
2.0	32.33	8.73	25.10	94	.60
3.0	32.33	8.62	25.11	94	.57
4.0	32.33	8.57	25.12	94	.58
5.0	32.32	8.51	25.12	94	.57
6.0	32.30	8.48	25.11	95	.54
7.0	32.30	8.45	25.12	95	.53
8.0	32.32	8.40	25.13	95	.53
9.0	32.32	8.38	25.14	95	.53
10.0	32.31	8.36	25.14	95	.53
11.0	32.32	8.31	25.15	95	.52
12.0	32.33	8.28	25.16	95	.51
13.0	32.32	8.25	25.16	95	.49
14.0	32.32	8.23	25.16	95	.49
15.0	32.32	8.22	25.16	95	.49
16.0	32.32	8.20	25.17	95	.48
17.0	32.32	8.18	25.17	95	.46
18.0	32.33	8.14	25.18	95	.51
19.0	32.34	8.08	25.20	94	.65
20.0	32.35	8.02	25.21	92	.79
21.0	32.35	8.00	25.22	92	.84
22.0	32.35	7.98	25.22	91	.91
23.0	32.35	7.97	25.22	90	1.01



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**************************************************************
*                                                            *
*    STATION  050875-4   1245  HRS.                          *
*    AT DUMPSITE 145 MINUTES AFTER SLUDGE DISCHARGE          *
*                                                            *
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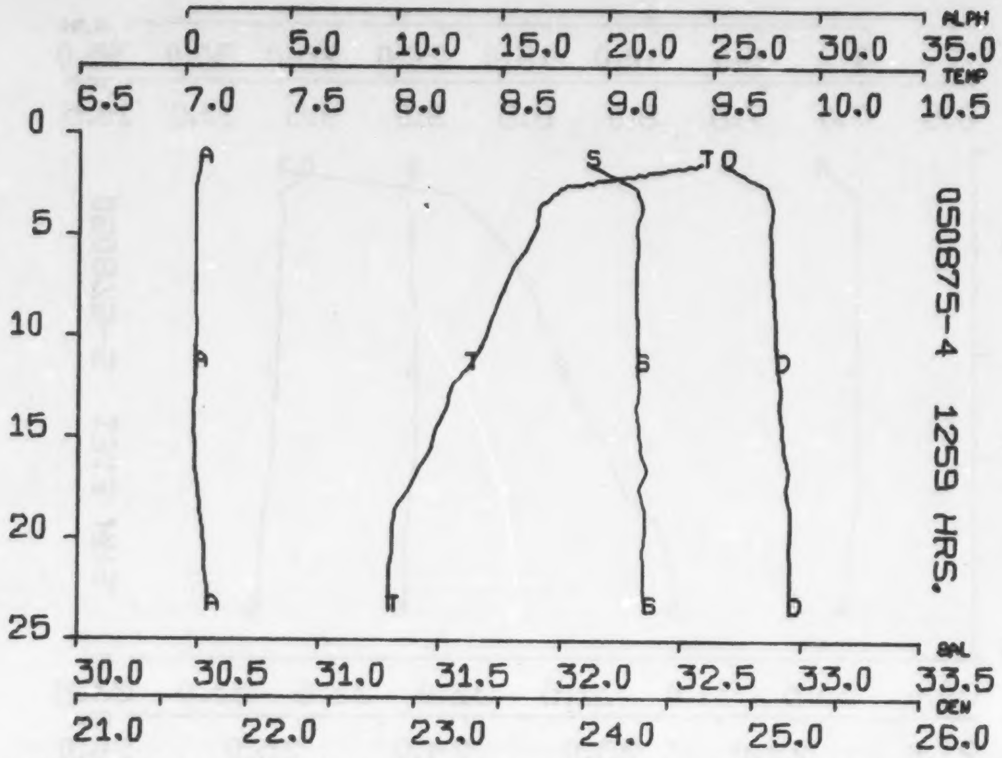
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	32.16	11.02	24.60	64	4.05
1.0	32.24	10.09	24.81	76	2.67
2.0	32.32	9.16	25.01	88	1.29
3.0	32.34	8.69	25.11	94	.61
4.0	32.33	8.65	25.11	94	.57
5.0	32.33	8.61	25.11	95	.55
6.0	32.34	8.57	25.12	95	.55
7.0	32.33	8.51	25.12	94	.57
8.0	32.32	8.40	25.14	95	.55
9.0	32.31	8.36	25.14	95	.54
10.0	32.32	8.32	25.15	95	.53
11.0	32.33	8.30	25.16	95	.52
12.0	32.33	8.28	25.16	95	.50
13.0	32.33	8.24	25.17	95	.49
14.0	32.33	8.21	25.17	95	.50
15.0	32.32	8.20	25.17	95	.48
16.0	32.35	8.14	25.20	95	.48
17.0	32.35	8.08	25.21	94	.60
18.0	32.34	8.06	25.20	93	.69
19.0	32.35	8.03	25.21	93	.74
20.0	32.35	8.01	25.22	92	.84
21.0	32.35	7.99	25.22	91	.97
22.0	32.35	7.99	25.22	90	1.01
23.0	32.35	7.98	25.22	91	.95



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*************************************************************
*                                                           *
*    STATION  050875-4   1259  HRS.                         *
*    AT DUMPSITE 159 MINUTES AFTER SLUDGE DISCHARGE         *
*                                                           *
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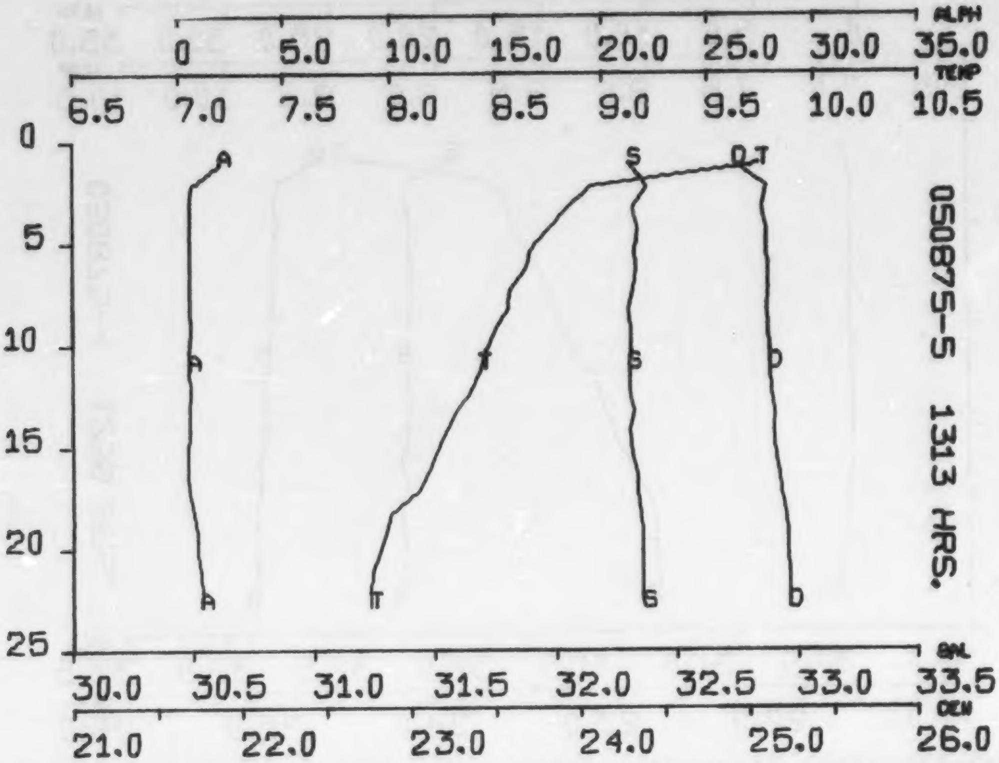
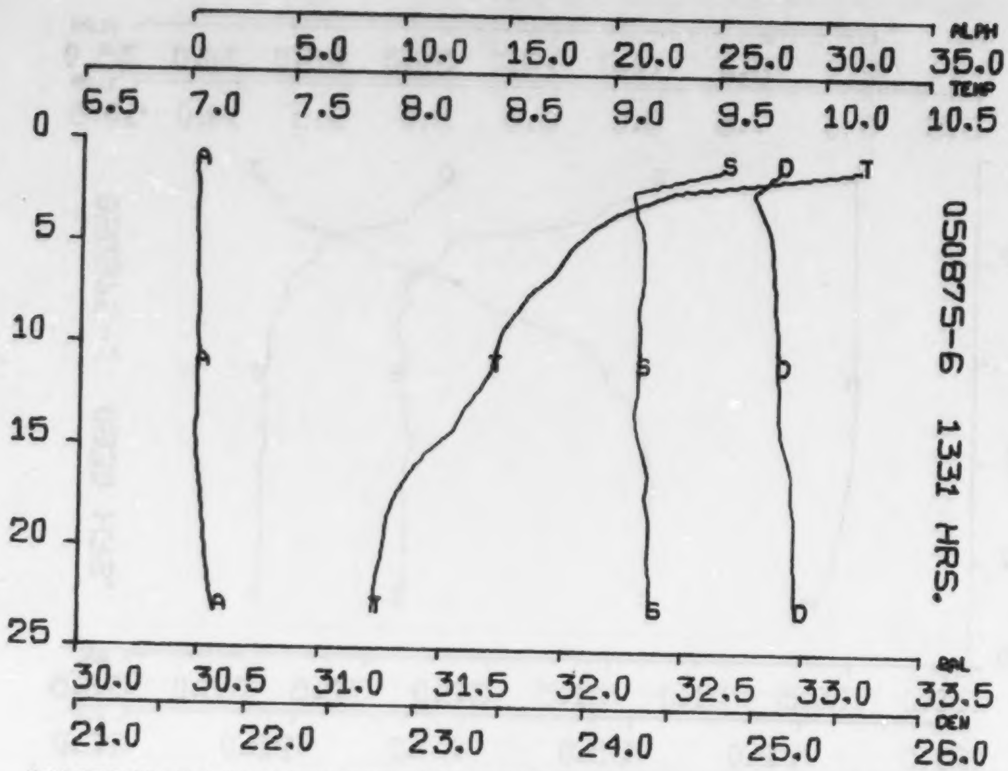
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	31.86	10.27	24.48	89	1.14
1.0	32.03	9.69	24.71	91	.89
2.0	32.21	9.12	24.94	94	.64
3.0	32.32	8.73	25.09	95	.50
4.0	32.32	8.67	25.09	95	.50
5.0	32.31	8.64	25.09	95	.50
6.0	32.31	8.59	25.10	95	.51
7.0	32.31	8.53	25.11	95	.52
8.0	32.31	8.49	25.11	95	.52
9.0	32.31	8.45	25.12	95	.54
10.0	32.31	8.42	25.13	95	.55
11.0	32.31	8.37	25.14	95	.52
12.0	32.32	8.30	25.15	95	.50
13.0	32.32	8.25	25.15	95	.47
14.0	32.32	8.21	25.16	95	.47
15.0	32.33	8.17	25.17	95	.48
16.0	32.34	8.14	25.19	95	.50
17.0	32.34	8.08	25.20	94	.60
18.0	32.34	8.03	25.20	93	.73
19.0	32.35	7.99	25.22	92	.85
20.0	32.35	7.98	25.22	91	.96
21.0	32.35	7.98	25.22	91	.99
22.0	32.34	7.97	25.22	90	1.09
23.0	32.35	7.97	25.22	89	1.14



STATION 050875-5 1313 HRS.

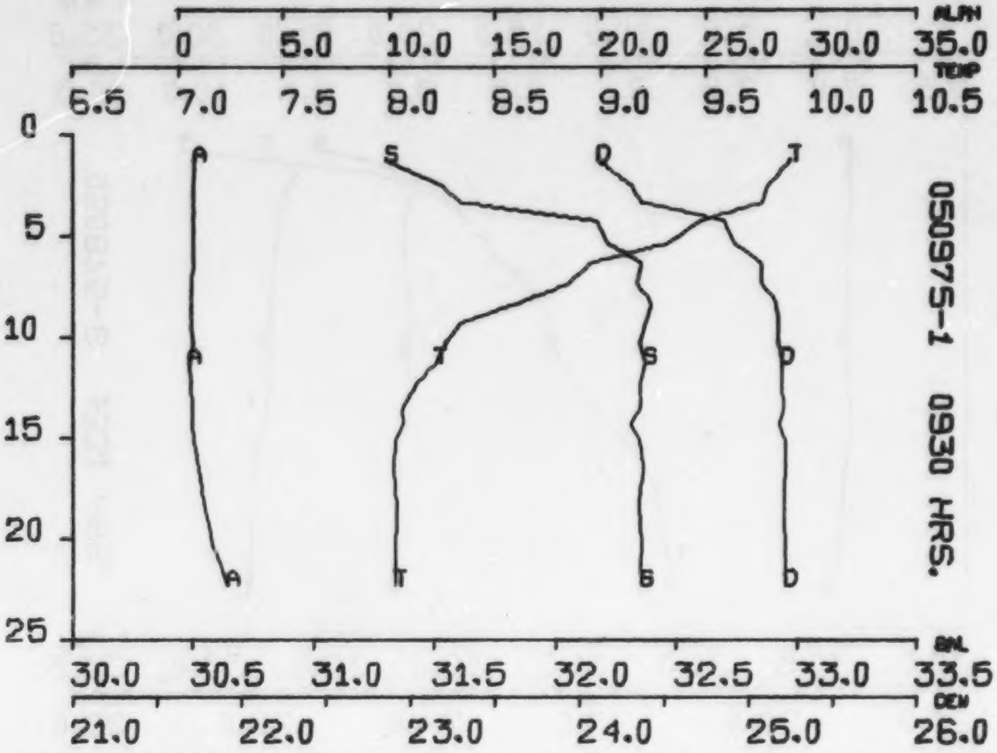
AT DUMPSITE 173 MINUTES AFTER SLUDGE DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	32.22	10.56	24.72	69	3.41
1.0	32.29	9.81	24.89	81	2.11
2.0	32.37	9.07	25.07	92	.81
3.0	32.33	8.86	25.07	95	.54
4.0	32.33	8.77	25.09	95	.54
5.0	32.33	8.69	25.10	95	.54
6.0	32.33	8.65	25.11	95	.54
7.0	32.32	8.58	25.11	95	.55
8.0	32.30	8.56	25.10	95	.55
9.0	32.31	8.51	25.11	95	.56
10.0	32.31	8.46	25.12	95	.55
11.0	32.30	8.43	25.12	95	.53
12.0	32.30	8.39	25.12	95	.56
13.0	32.32	8.33	25.15	95	.51
14.0	32.31	8.28	25.15	95	.51
15.0	32.31	8.23	25.16	95	.49
16.0	32.33	8.19	25.18	95	.47
17.0	32.34	8.15	25.19	95	.53
18.0	32.35	8.03	25.21	93	.69
19.0	32.36	7.98	25.23	91	.91
20.0	32.36	7.95	25.23	91	.94
21.0	32.36	7.92	25.24	90	1.07
22.0	32.36	7.91	25.24	89	1.13



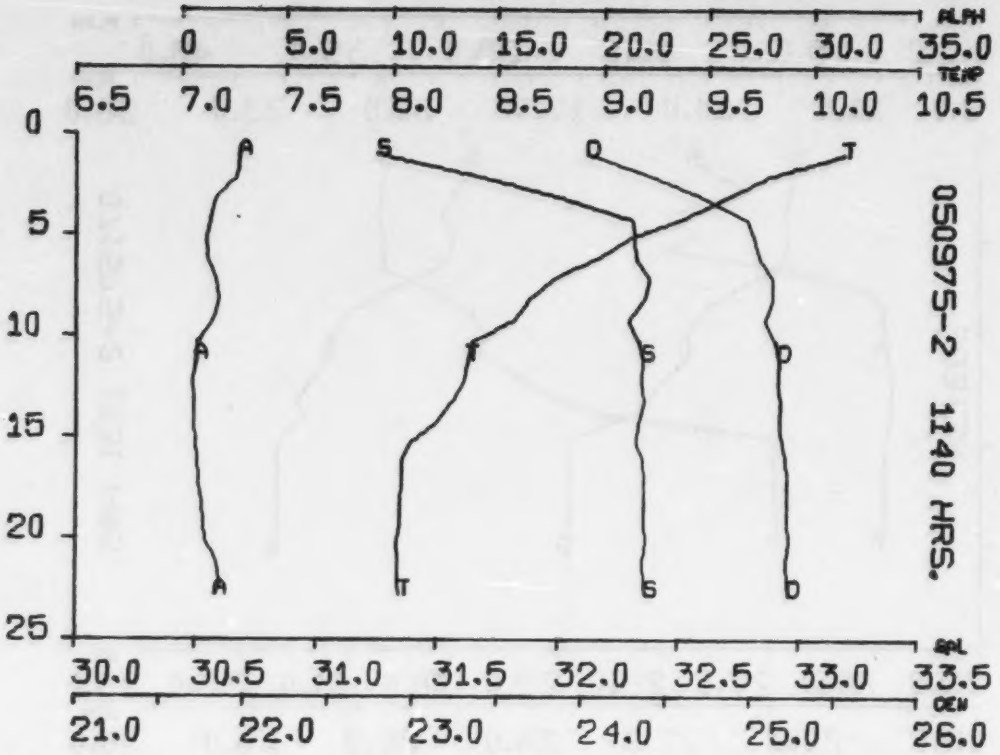
STATION 050875-6 1331 HRS.
OUT OF DUMP AREA

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	33.07	11.18	25.28	97	.30
1.0	32.73	10.36	25.14	96	.39
2.0	32.38	9.55	25.00	95	.49
3.0	32.28	9.12	25.00	95	.48
4.0	32.31	8.93	25.05	95	.47
5.0	32.32	8.82	25.08	95	.51
6.0	32.32	8.75	25.09	95	.54
7.0	32.32	8.65	25.10	94	.57
8.0	32.31	8.57	25.10	94	.58
9.0	32.31	8.50	25.11	95	.56
10.0	32.31	8.47	25.12	94	.59
11.0	32.31	8.44	25.12	95	.55
12.0	32.31	8.39	25.13	95	.53
13.0	32.29	8.32	25.13	95	.49
14.0	32.30	8.26	25.14	95	.47
15.0	32.32	8.17	25.17	95	.51
16.0	32.35	8.08	25.20	94	.57
17.0	32.34	8.01	25.21	93	.69
18.0	32.35	7.97	25.22	92	.78
19.0	32.36	7.95	25.23	92	.88
20.0	32.35	7.94	25.23	91	.96
21.0	32.36	7.92	25.24	90	1.06
22.0	32.36	7.90	25.24	89	1.20
23.0	32.36	7.89	25.24	87	1.41



STATION 050975-1 0935 HRS.
AT DUMPSITE BEFORE SLUDGE DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	31.06	10.02	23.90	92	.84
1.0	31.25	9.93	24.07	93	.77
2.0	31.44	9.83	24.23	93	.70
3.0	31.58	9.77	24.35	93	.68
4.0	32.01	9.55	24.71	93	.70
5.0	32.21	9.36	24.90	93	.70
6.0	32.32	9.07	25.03	93	.68
7.0	32.35	8.88	25.08	94	.60
8.0	32.39	8.68	25.14	94	.57
9.0	32.38	8.40	25.18	94	.58
10.0	32.36	8.29	25.18	94	.63
11.0	32.37	8.23	25.20	94	.58
12.0	32.36	8.15	25.20	94	.60
13.0	32.35	8.09	25.21	94	.64
14.0	32.33	8.06	25.19	93	.68
15.0	32.35	8.03	25.21	93	.73
16.0	32.36	8.03	25.22	91	.91
17.0	32.36	8.03	25.22	90	1.08
18.0	32.35	8.03	25.21	89	1.20
19.0	32.35	8.03	25.21	87	1.41
20.0	32.35	8.03	25.22	85	1.59
21.0	32.35	8.03	25.22	83	1.92
22.0	32.36	8.02	25.22	80	2.28



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*                                                                 *
*    STATION  050975-2   1140  HRS.                               *
*    AT DUMPSITE 97 MINUTES AFTER SLUDGE DISCHARGE                *
*                                                                 *
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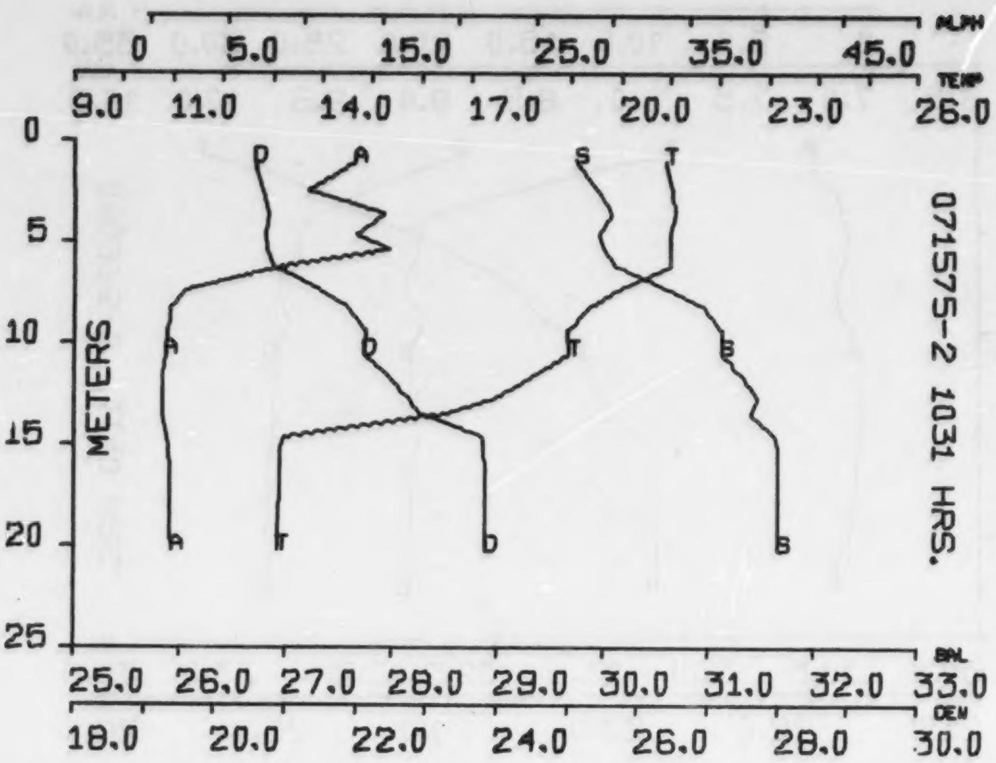
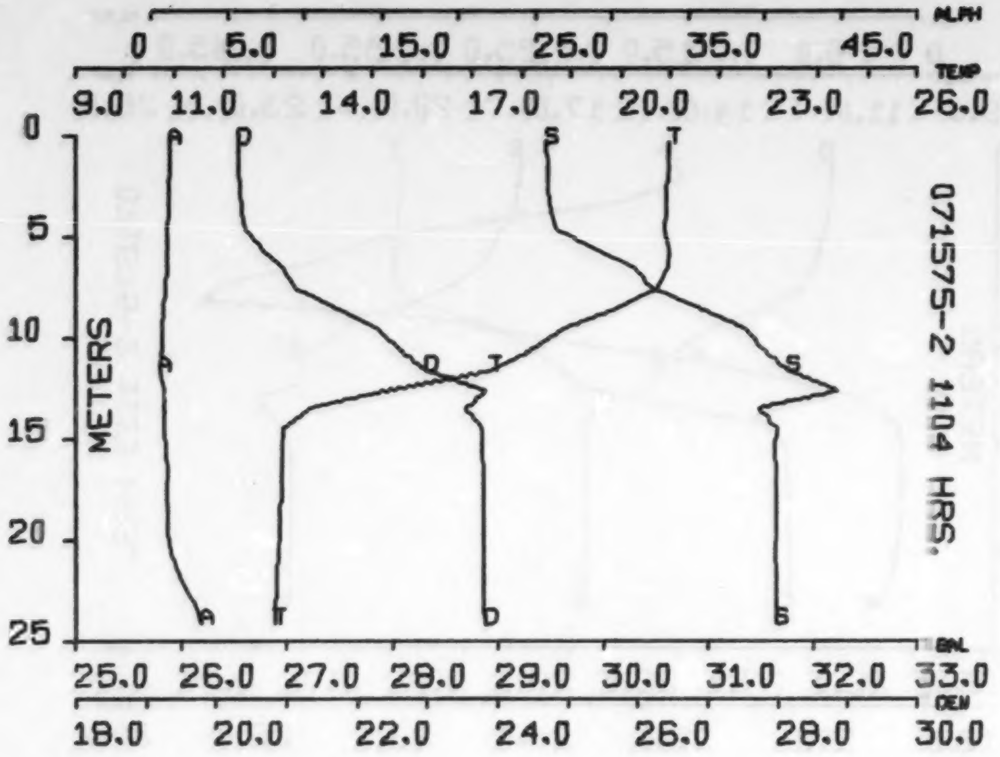
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	30.84	10.50	23.65	74	2.97
1.0	31.24	10.15	24.02	76	2.78
2.0	31.64	9.79	24.39	77	2.59
3.0	31.97	9.60	24.68	85	1.66
4.0	32.25	9.39	24.93	87	1.35
5.0	32.32	9.15	25.02	89	1.16
6.0	32.32	8.98	25.05	88	1.24
7.0	32.37	8.78	25.12	85	1.57
8.0	32.36	8.67	25.13	84	1.79
9.0	32.30	8.59	25.09	86	1.57
10.0	32.33	8.42	25.14	91	.91
11.0	32.35	8.36	25.17	93	.71
12.0	32.34	8.34	25.16	94	.58
13.0	32.36	8.29	25.18	94	.58
14.0	32.34	8.22	25.17	94	.60
15.0	32.33	8.11	25.18	93	.68
16.0	32.35	8.05	25.21	93	.75
17.0	32.36	8.04	25.22	92	.84
18.0	32.36	8.04	25.22	91	.97
19.0	32.36	8.04	25.22	90	1.05
20.0	32.37	8.02	25.23	89	1.11
21.0	32.35	8.03	25.21	85	1.67
22.0	32.36	8.03	25.22	83	1.83



STATION 071575-2 1031 HRS.
AT DUMPSITE 14 MINUTES AFTER SLUDGE DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	29.60	20.83	20.47	19	15.54
1.0	29.75	20.91	20.56	26	13.30
2.0	29.89	20.99	20.65	33	11.07
3.0	30.02	21.04	20.73	29	12.64
4.0	30.03	21.02	20.74	24	14.37
5.0	29.99	20.96	20.72	24	14.39
6.0	30.10	20.97	20.81	39	9.68
7.0	30.49	20.18	21.31	70	3.87
8.0	30.89	19.43	21.80	87	1.44
9.0	31.09	19.02	22.05	90	1.11
10.0	31.13	18.92	22.11	91	.99
11.0	31.22	18.58	22.26	92	.86
12.0	31.38	17.88	22.56	93	.73
13.0	31.44	16.98	22.81	93	.71
14.0	31.52	14.81	23.35	91	.92
15.0	31.67	13.14	23.81	89	1.13
16.0	31.68	13.11	23.82	89	1.21
17.0	31.67	13.10	23.82	88	1.23
18.0	31.67	13.09	23.82	88	1.25
19.0	31.68	13.08	23.83	88	1.28
20.0	31.68	13.08	23.83	87	1.34



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***************************************************************
*                                                             *
*    STATION  071575-2   1104  HRS.                           *
*    AT CLOUDS EDGE 47 MINUTES AFTER DISCHARGE                *
*                                                             *
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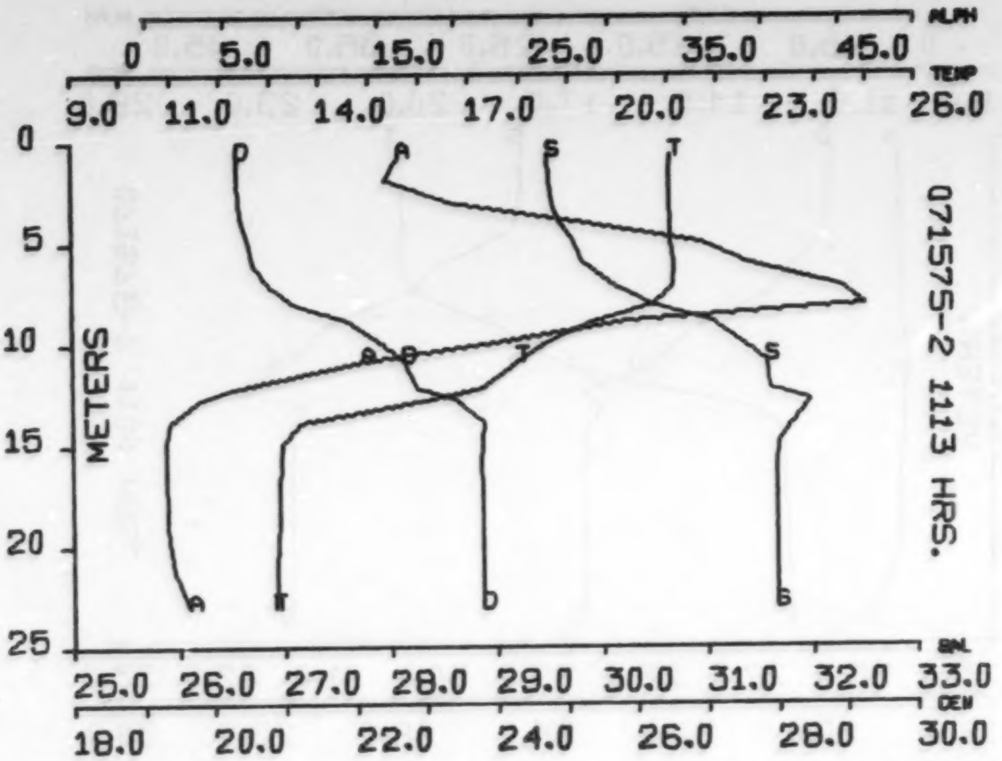
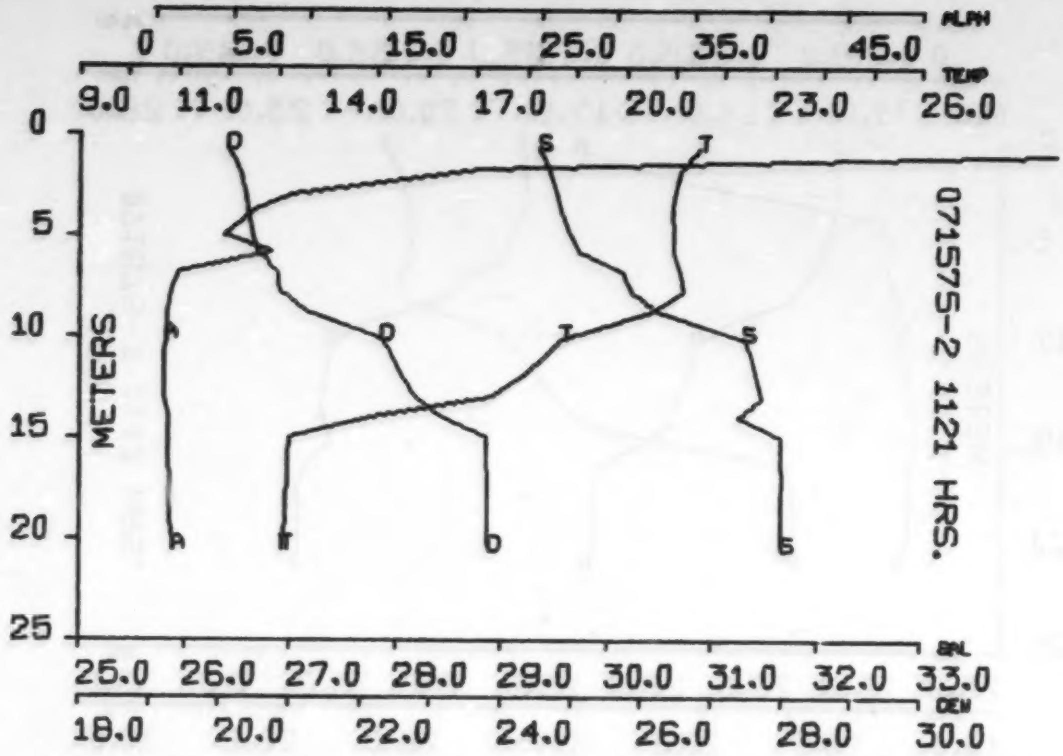
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	29.47	20.98	20.32	89	1.13
1.0	29.47	20.96	20.33	89	1.12
2.0	29.48	20.93	20.35	90	1.09
3.0	29.50	20.90	20.37	90	1.07
4.0	29.53	20.90	20.39	90	1.04
5.0	29.71	20.92	20.52	91	.96
6.0	30.09	20.95	20.80	91	.92
7.0	30.38	20.84	21.05	92	.86
8.0	30.69	20.30	21.43	92	.78
9.0	31.14	19.34	22.02	93	.67
10.0	31.44	18.50	22.45	94	.59
11.0	31.65	17.80	22.78	95	.55
12.0	31.97	16.47	23.33	93	.68
13.0	31.90	14.53	23.70	92	.84
14.0	31.58	13.42	23.69	92	.84
15.0	31.65	13.17	23.79	91	.93
16.0	31.65	13.15	23.79	90	1.01
17.0	31.65	13.14	23.80	90	1.01
18.0	31.65	13.13	23.80	90	1.01
19.0	31.65	13.11	23.80	90	1.07
20.0	31.64	13.09	23.80	89	1.18
21.0	31.64	13.07	23.80	86	1.49
22.0	31.65	13.05	23.82	82	2.00
23.0	31.65	13.03	23.82	76	2.71
24.0	31.65	13.02	23.82	73	3.20



STATION 071575-2 1113 HRS.
AT DROGUES 56 MINUTES AFTER DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	29.50	21.04	20.34	19	16.76
1.0	29.50	21.02	20.34	20	15.92
2.0	29.51	21.00	20.35	21	15.69
3.0	29.54	21.01	20.37	14	19.61
4.0	29.62	21.03	20.43	6	28.59
5.0	29.76	21.04	20.53	3	36.20
6.0	29.84	21.10	20.57	2	39.12
7.0	30.11	21.06	20.79	1	44.70
8.0	30.49	20.61	21.19	1	46.17
9.0	31.09	19.33	21.98	5	29.74
10.0	31.37	18.46	22.41	12	21.66
11.0	31.58	17.83	22.72	30	12.66
12.0	31.60	17.28	22.87	55	6.28
13.0	31.96	15.58	23.52	76	2.77
14.0	31.79	13.54	23.82	88	1.28
15.0	31.66	13.20	23.80	90	1.09
16.0	31.65	13.18	23.79	90	1.06
17.0	31.65	13.16	23.80	90	1.08
18.0	31.66	13.15	23.80	89	1.12
19.0	31.66	13.14	23.80	89	1.17
20.0	31.65	13.11	23.80	87	1.34
21.0	31.65	13.09	23.81	85	1.60
22.0	31.65	13.08	23.81	82	2.00



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*                                                       *
*    STATION  071575-2   1121  HRS.                     *
*    AT DUMPSITE 64 MINUTES AFTER DISCHARGE             *
*                                                       *
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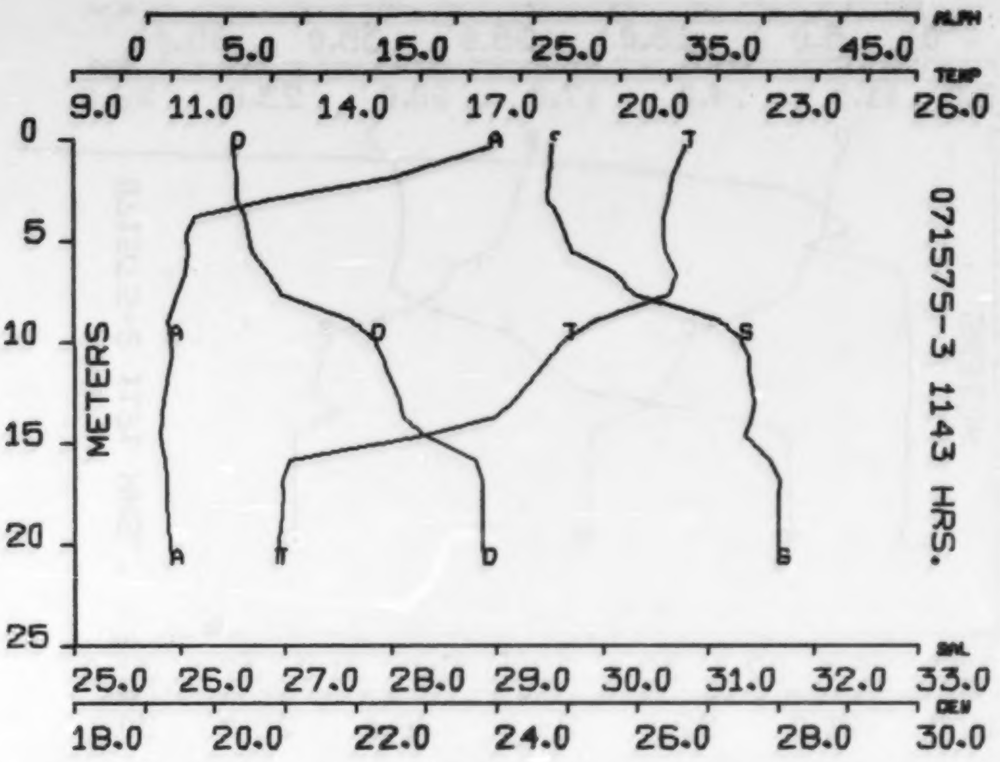
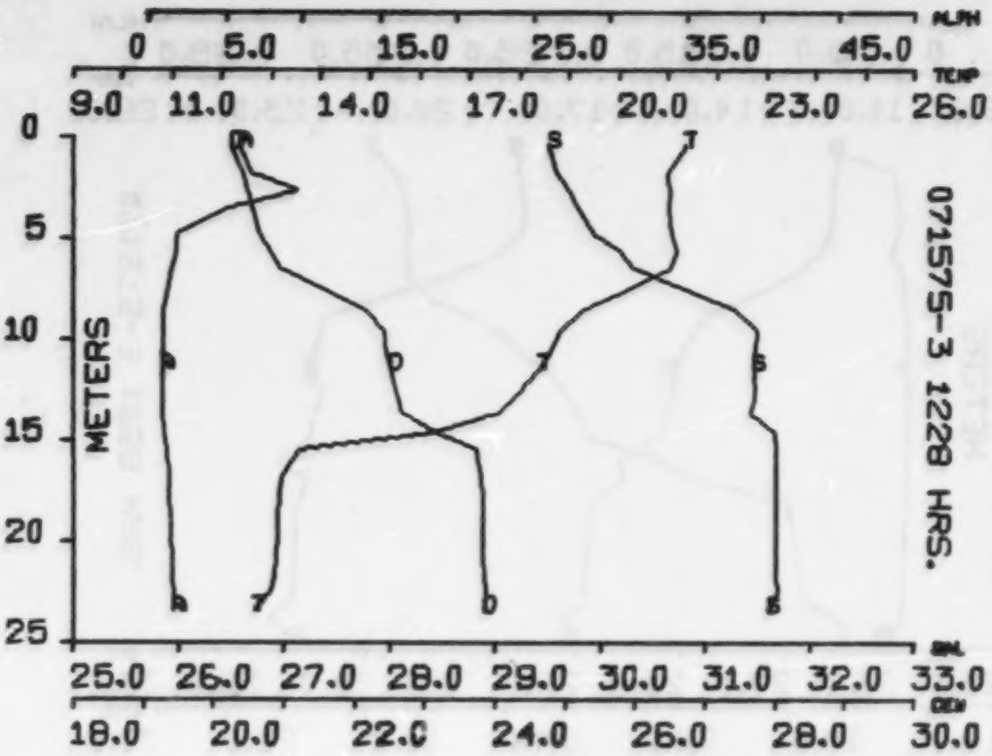
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	29.28	21.70	19.99	-8	100.19
1.0	29.38	21.35	20.16	4	53.54
2.0	29.47	21.07	20.30	20	17.88
3.0	29.53	20.95	20.38	43	8.41
4.0	29.58	20.94	20.42	56	5.84
5.0	29.66	20.98	20.47	64	4.49
6.0	29.85	21.00	20.61	57	5.94
7.0	30.18	21.11	20.83	88	1.25
8.0	30.31	20.97	20.97	92	.84
9.0	30.68	20.09	21.47	93	.68
10.0	31.23	18.83	22.21	94	.59
11.0	31.39	18.30	22.46	95	.50
12.0	31.43	17.81	22.61	95	.50
13.0	31.46	17.02	22.82	95	.50
14.0	31.27	14.78	23.17	92	.84
15.0	31.66	13.21	23.79	92	.86
16.0	31.65	13.19	23.79	92	.84
17.0	31.67	13.17	23.80	91	.89
18.0	31.66	13.16	23.80	92	.81
19.0	31.65	13.13	23.80	91	.94
20.0	31.66	13.10	23.81	90	1.09



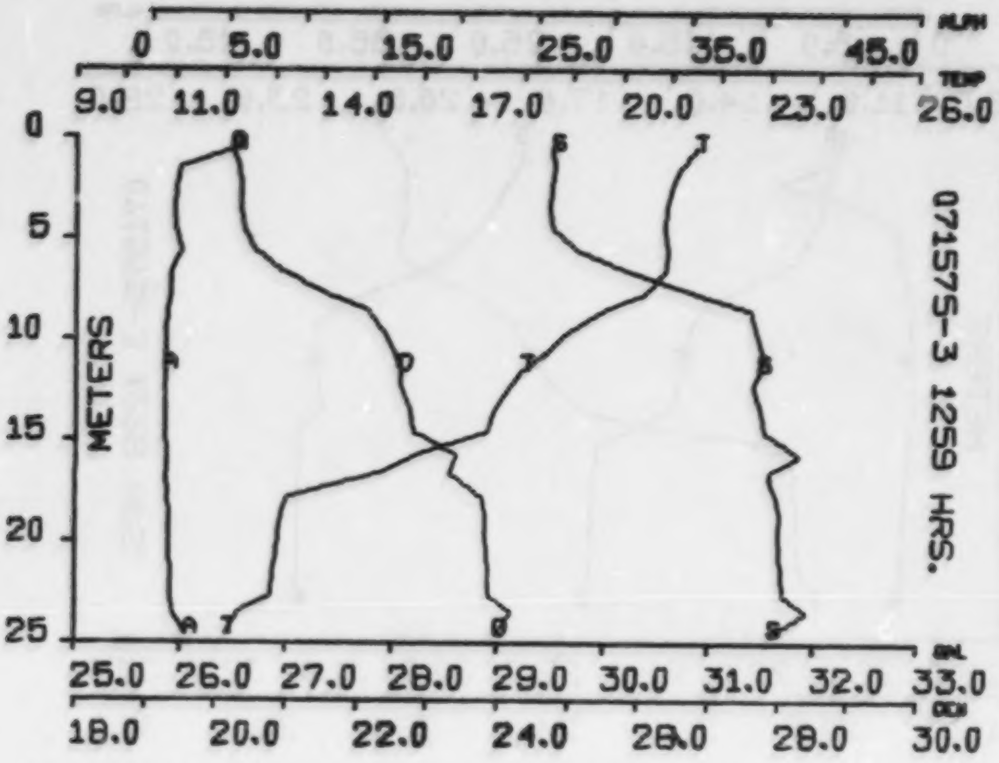
STATION 071575-3 1143 HRS.
AT DUMPSITE 86 MINUTES AFTER DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	29.53	21.37	20.27	8	23.80
1.0	29.51	21.19	20.31	15	19.43
2.0	29.50	21.03	20.33	25	14.53
3.0	29.49	20.96	20.35	49	7.20
4.0	29.61	20.87	20.46	76	2.77
5.0	29.69	20.89	20.52	79	2.40
6.0	29.90	21.01	20.65	79	2.40
7.0	30.20	21.07	20.85	81	2.09
8.0	30.51	20.60	21.21	85	1.61
9.0	31.12	19.47	21.97	89	1.20
10.0	31.33	18.85	22.29	87	1.40
11.0	31.39	18.47	22.42	88	1.29
12.0	31.42	18.13	22.53	90	1.01
13.0	31.44	17.75	22.63	92	.79
14.0	31.40	16.98	22.78	93	.67
15.0	31.44	15.12	23.22	93	.76
16.0	31.62	13.30	23.74	91	.99
17.0	31.68	13.20	23.81	90	1.04
18.0	31.67	13.19	23.80	90	1.06
19.0	31.67	13.16	23.81	90	1.10
20.0	31.67	13.12	23.82	88	1.24



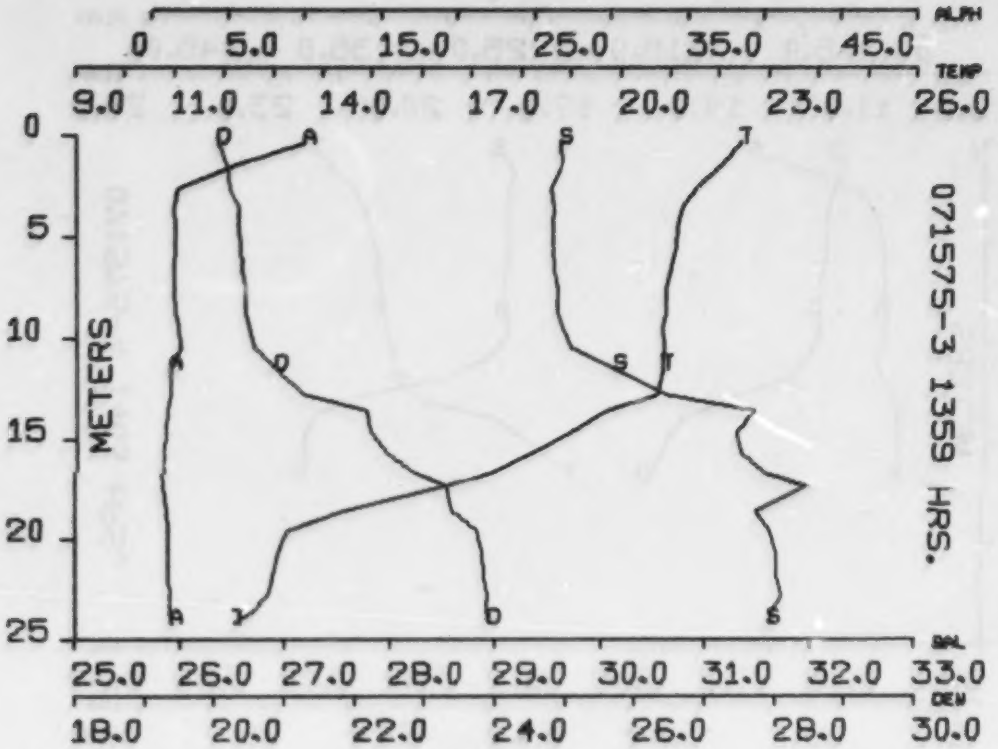
STATION 071575-3 1228 HRS.
IN CENTER OF SLICK 13 MINUTES AFTER DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	29.48	21.48	20.21	57	5.58
1.0	29.55	21.19	20.33	54	6.20
2.0	29.63	21.00	20.44	47	7.59
3.0	29.75	21.03	20.52	49	7.45
4.0	29.86	21.03	20.61	70	3.63
5.0	30.01	21.09	20.71	84	1.73
6.0	30.25	21.11	20.88	86	1.53
7.0	30.57	20.57	21.27	89	1.19
8.0	31.05	19.70	21.85	91	.96
9.0	31.39	19.06	22.28	92	.87
10.0	31.49	18.73	22.43	92	.84
11.0	31.48	18.49	22.48	92	.83
12.0	31.47	18.18	22.56	92	.81
13.0	31.46	17.81	22.64	92	.80
14.0	31.53	17.02	22.87	92	.85
15.0	31.68	14.92	23.45	90	1.01
16.0	31.69	13.39	23.78	89	1.16
17.0	31.69	13.19	23.82	88	1.24
18.0	31.69	13.15	23.83	88	1.31
19.0	31.69	13.12	23.83	87	1.36
20.0	31.69	13.09	23.84	87	1.40
21.0	31.69	13.06	23.84	86	1.45
22.0	31.70	13.01	23.86	86	1.52
23.0	31.65	12.77	23.87	85	1.61



STATION 071575-3 1259 HRS.
IN CENTER OF SLICK 44 MINUTES AFTER DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	29.49	21.66	20.17	47	6.92
1.0	29.52	21.29	20.28	74	3.20
2.0	29.51	21.04	20.34	85	1.61
3.0	29.48	20.92	20.35	86	1.46
4.0	29.49	20.85	20.38	87	1.45
5.0	29.63	20.87	20.48	84	1.71
6.0	29.97	20.88	20.73	86	1.49
7.0	30.50	20.66	21.19	89	1.14
8.0	31.08	20.08	21.78	90	1.07
9.0	31.42	19.27	22.25	92	.89
10.0	31.48	18.69	22.44	92	.83
11.0	31.50	18.22	22.57	92	.82
12.0	31.43	17.81	22.61	92	.81
13.0	31.47	17.52	22.71	92	.81
14.0	31.51	17.33	22.79	92	.80
15.0	31.67	16.64	23.07	92	.85
16.0	31.74	15.53	23.37	91	.94
17.0	31.59	14.37	23.50	90	1.02
18.0	31.66	13.21	23.79	89	1.12
19.0	31.68	13.11	23.83	89	1.18
20.0	31.68	13.06	23.83	89	1.19
21.0	31.70	13.01	23.86	89	1.21
22.0	31.71	12.97	23.88	88	1.24
23.0	31.83	12.63	24.04	88	1.33
24.0	31.75	12.15	24.07	83	1.89



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*                                                           *
*    STATION  071575-3  1359  HRS.                          *
*    AT DUMPSITE 104 MINUTES AFTER DISCHARGE                *
*                                                           *
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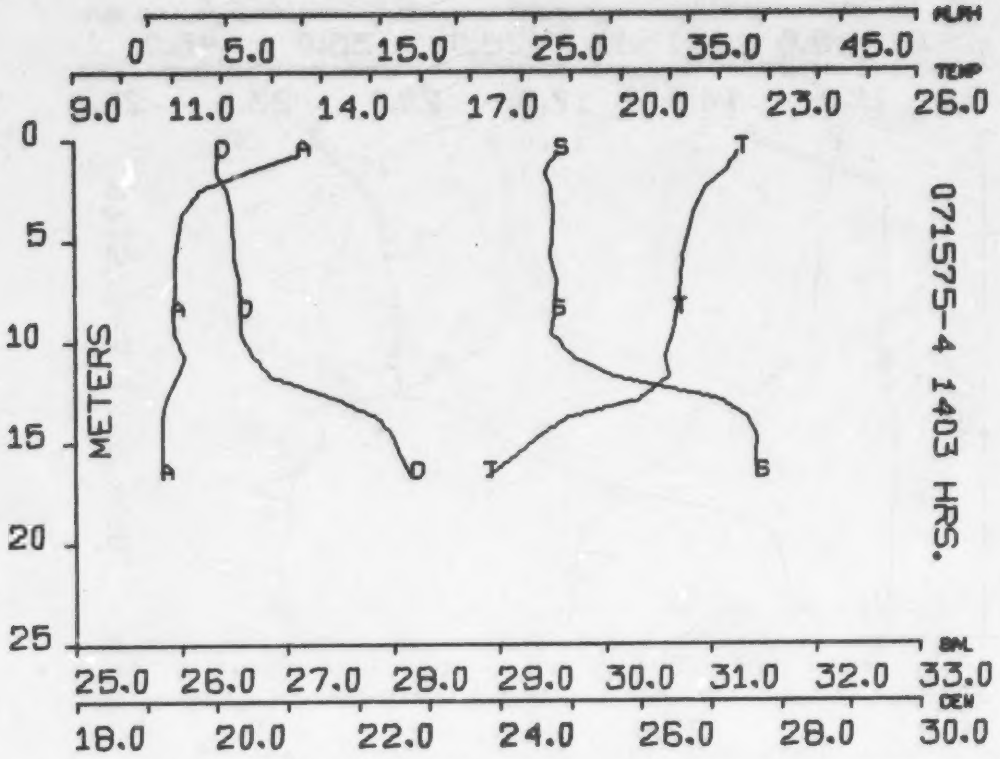
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	29.61	22.56	20.00	29	11.61
1.0	29.62	22.19	20.11	49	7.31
2.0	29.57	21.78	20.19	71	3.63
3.0	29.52	21.39	20.26	86	1.53
4.0	29.53	21.16	20.32	87	1.41
5.0	29.53	21.11	20.34	86	1.47
6.0	29.53	21.05	20.36	87	1.44
7.0	29.55	20.96	20.39	87	1.43
8.0	29.57	20.90	20.42	86	1.47
9.0	29.60	20.87	20.45	85	1.60
10.0	29.67	20.85	20.51	84	1.73
11.0	29.93	20.85	20.71	87	1.42
12.0	30.31	20.79	21.01	89	1.13
13.0	30.87	20.37	21.55	90	1.06
14.0	31.37	19.39	22.18	92	.86
15.0	31.29	18.68	22.29	92	.79
16.0	31.39	17.89	22.56	93	.76
17.0	31.76	16.92	23.07	92	.78
18.0	31.70	15.38	23.37	91	.92
19.0	31.54	13.95	23.55	90	1.06
20.0	31.65	13.22	23.78	89	1.14
21.0	31.69	13.08	23.84	89	1.18
22.0	31.70	12.99	23.86	89	1.19
23.0	31.70	12.81	23.90	88	1.25
24.0	31.62	12.33	23.93	87	1.40



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*                                                           *
*    STATION  071575-4   1403  HRS.                         *
*    AT DUMPSITE 108 MINUTES AFTER DISCHARGE                *
*                                                           *
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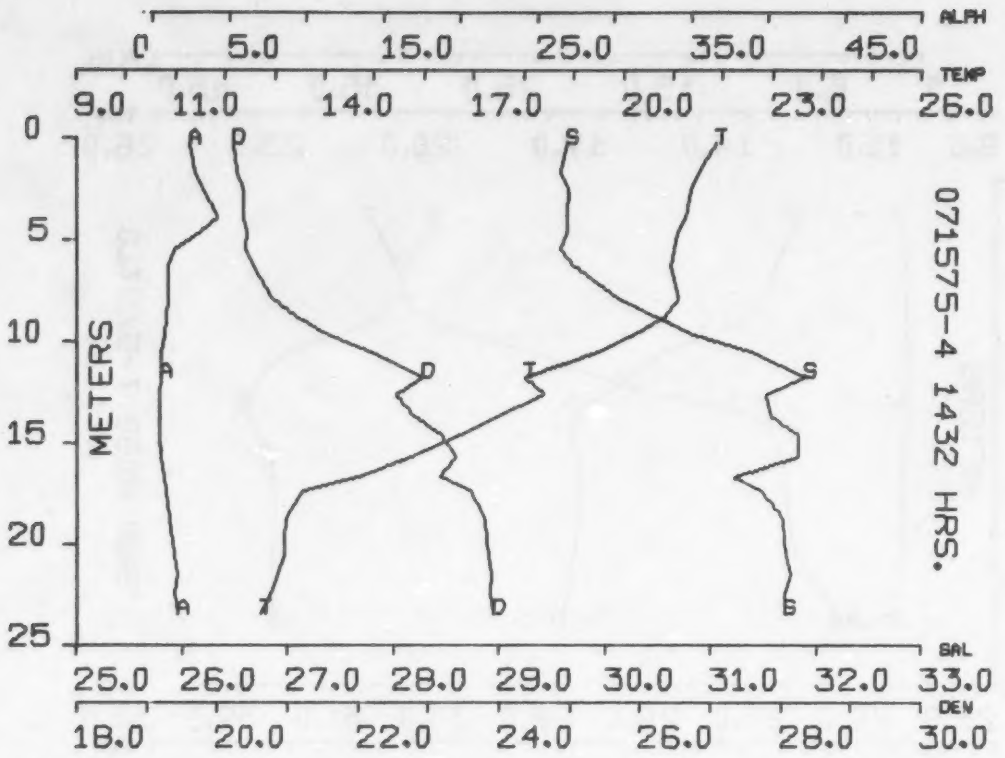
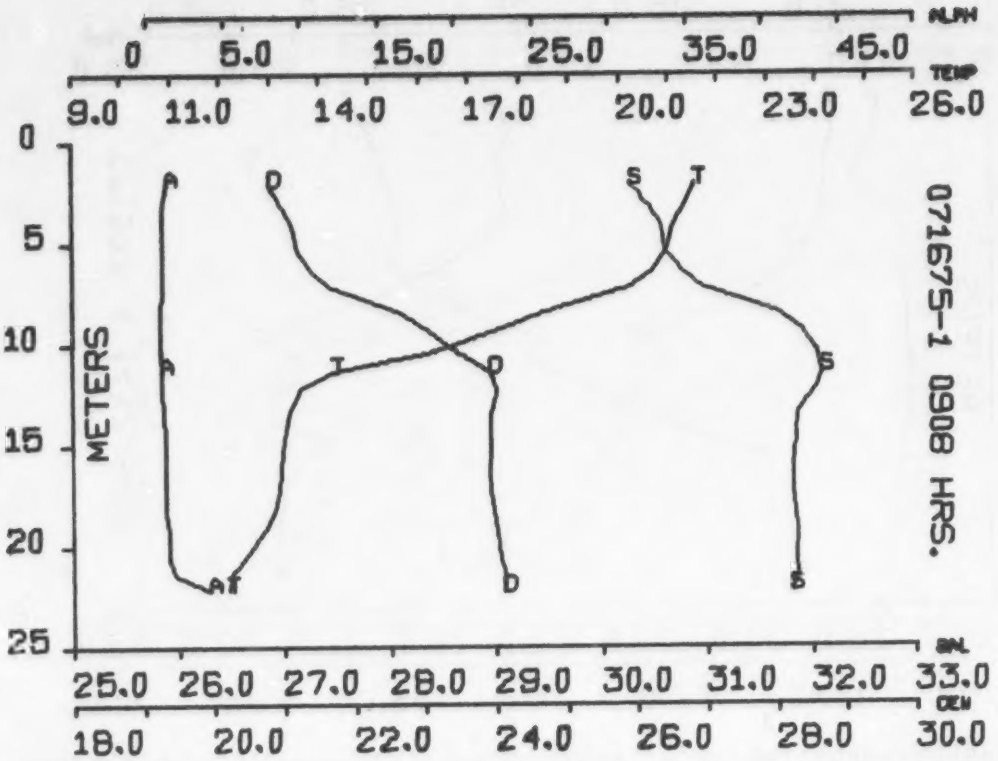
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	29.65	22.51	20.05	27	12.12
1.0	29.51	22.23	20.02	44	8.31
2.0	29.48	21.86	20.10	63	4.69
3.0	29.51	21.54	20.21	78	2.56
4.0	29.52	21.39	20.26	83	1.83
5.0	29.51	21.29	20.27	85	1.63
6.0	29.51	21.21	20.30	86	1.48
7.0	29.55	21.15	20.34	86	1.46
8.0	29.53	21.10	20.34	87	1.44
9.0	29.51	21.02	20.35	86	1.45
10.0	29.58	20.93	20.43	84	1.77
11.0	29.82	20.87	20.62	82	1.93
12.0	30.37	20.77	21.06	88	1.33
13.0	31.14	20.04	21.84	93	.77
14.0	31.39	18.69	22.36	94	.64
15.0	31.45	18.11	22.55	94	.61
16.0	31.44	17.61	22.67	94	.59



STATION 071575-4 1432 HRS.
AT DUMPSITE 137 MINUTES AFTER DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	29.66	21.92	20.22	79	2.31
1.0	29.61	21.65	20.25	78	2.55
2.0	29.61	21.42	20.32	75	2.94
3.0	29.65	21.30	20.38	70	3.62
4.0	29.64	21.21	20.40	67	4.02
5.0	29.64	21.04	20.44	79	2.38
6.0	29.67	20.97	20.48	89	1.15
7.0	29.92	21.04	20.65	90	1.01
8.0	30.19	21.05	20.85	91	.89
9.0	30.58	20.63	21.26	92	.79
10.0	31.07	19.89	21.82	94	.63
11.0	31.60	18.88	22.48	95	.53
12.0	31.79	18.12	22.81	95	.48
13.0	31.54	18.08	22.63	96	.42
14.0	31.67	17.21	22.93	96	.41
15.0	31.84	16.33	23.26	96	.45
16.0	31.63	15.37	23.32	94	.57
17.0	31.34	14.18	23.35	93	.75
18.0	31.59	13.40	23.70	91	.96
19.0	31.70	13.22	23.82	89	1.14
20.0	31.71	13.18	23.83	88	1.28
21.0	31.74	13.10	23.88	86	1.50
22.0	31.73	12.97	23.89	86	1.49
23.0	31.70	12.79	23.90	86	1.55



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*                                                          *
*    STATION  071675-1   0908  HRS.                        *
*    AT DUMPSITE BEFORE SLUDGE DISCHARGE                   *
*                                                          *
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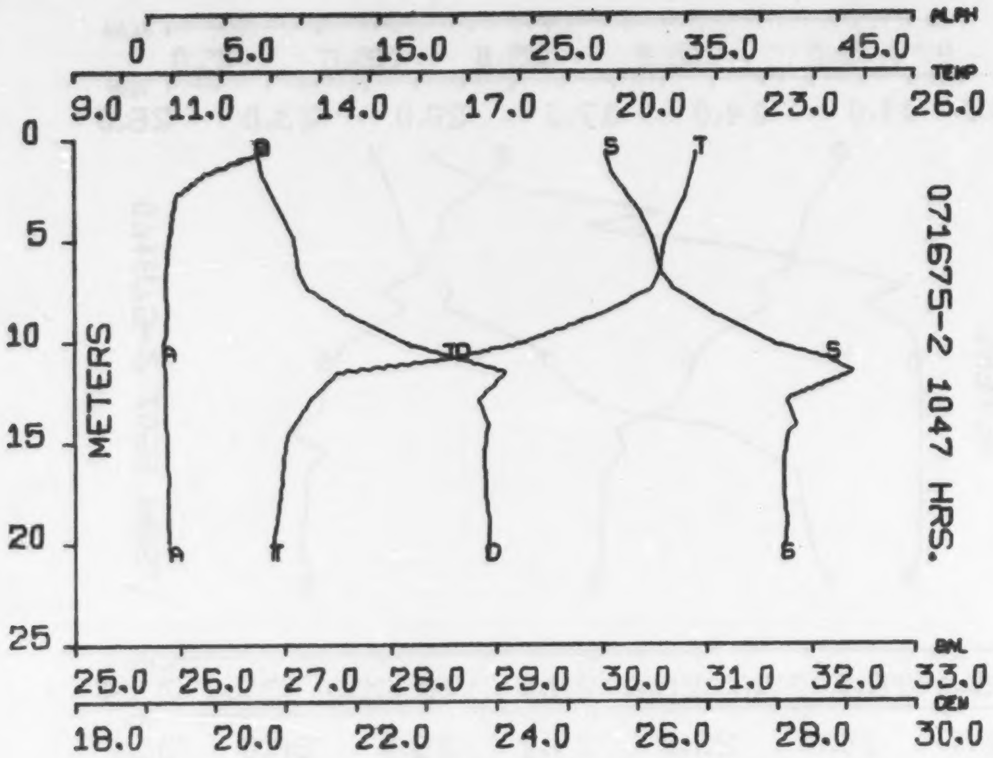
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
3.0	30.44	21.32	20.97	92	.88
4.0	30.57	21.09	21.13	92	.84
5.0	30.61	20.97	21.19	92	.83
6.0	30.73	20.75	21.34	92	.87
7.0	30.93	20.28	21.61	92	.85
8.0	31.45	19.01	22.33	92	.78
9.0	31.86	17.80	22.94	93	.73
10.0	32.01	16.64	23.33	93	.71
11.0	32.08	14.86	23.78	92	.79
12.0	32.06	13.69	24.00	92	.86
13.0	31.92	13.41	23.95	91	.90
14.0	31.85	13.29	23.92	91	.96
15.0	31.84	13.22	23.93	90	1.02
16.0	31.81	13.17	23.92	90	1.07
17.0	31.81	13.14	23.92	90	1.10
18.0	31.84	13.07	23.96	90	1.10
19.0	31.86	12.89	24.01	88	1.24
20.0	31.85	12.62	24.05	88	1.27
21.0	31.85	12.30	24.11	86	1.50
22.0	31.82	12.14	24.12	71	3.46



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********************************************************************
*                                                                  *
*    STATION  071675-2   1047  HRS.                                *
*    AT CLOUDS EDGE 28 MINUTES AFTER DISCHARGE                     *
*                                                                  *
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 DEPTH     SALINITY    TEMPERATURE     SIGMA-T     TRANSMIT.    ALPHA
  (M)        (PPT)         (C)                        (%)       (M-1)
    0        30.02        21.59         20.58          37        9.19
  1.0        30.08        21.50         20.65          57        5.70
  2.0        30.17        21.41         20.74          76        2.83
  3.0        30.30        21.27         20.88          86        1.54
  4.0        30.42        21.08         21.02          88        1.32
  5.0        30.51        20.90         21.14          90        1.10
  6.0        30.56        20.84         21.19          90        1.02
  7.0        30.64        20.72         21.28          91         .96
  8.0        30.88        20.15         21.61          91         .98
  9.0        31.22        19.22         22.11          91         .95
 10.0        31.60        18.10         22.67          92         .86
 11.0        32.23        15.91         23.66          92         .85
 12.0        32.17        14.10         24.00          91         .91
 13.0        31.79        13.70         23.79          91         .93
 14.0        31.86        13.42         23.90          91         .94
 15.0        31.75        13.26         23.85          90        1.03
 16.0        31.73        13.22         23.84          90        1.07
 17.0        31.73        13.18         23.85          89        1.14
 18.0        31.75        13.13         23.87          90        1.07
 19.0        31.76        13.06         23.90          90        1.09
 20.0        31.74        13.01         23.89          89        1.15
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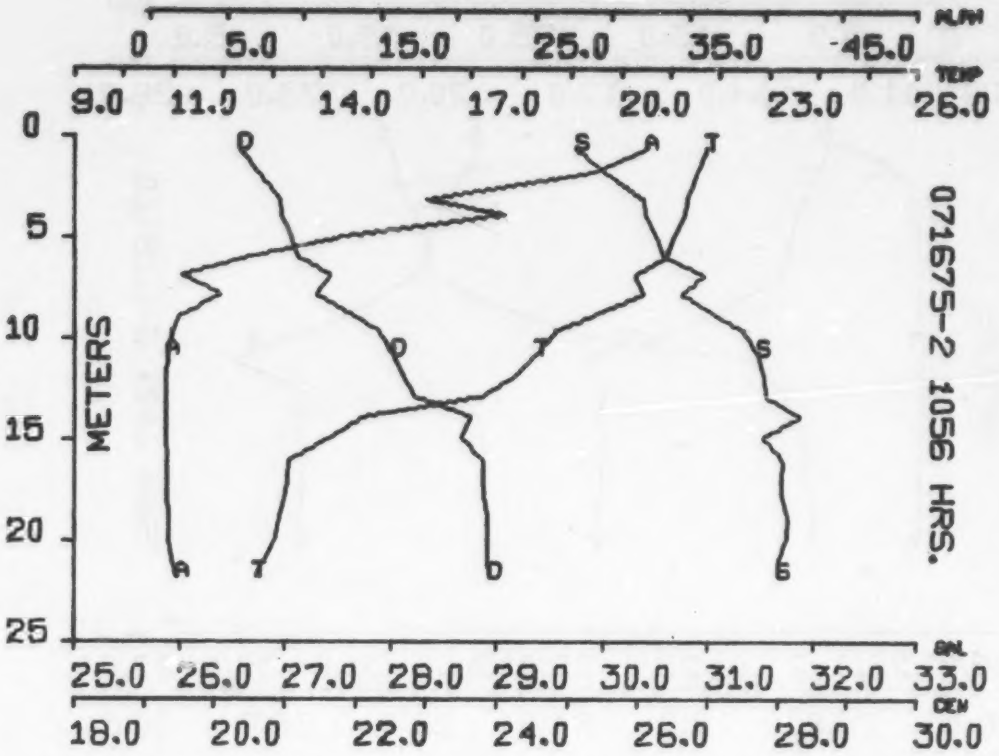

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*****************************************************************
*                                                               *
*     STATION  071675-2   1056  HRS.                            *
*     AT DRUGUES 37 MINUTES AFTER DISCHARGE                     *
*                                                               *
*****************************************************************

DEPTH     SALINITY    TEMPERATURE     SIGMA-T    TRANSMIT.    ALPHA
 (M)       (PPT)          (C)                       (%)       (M-1)
   0       29.61         21.81         20.21          3       34.03
  1.0      29.84         21.63         20.43          5       31.07
  2.0      30.09         21.46         20.66          8       26.81
  3.0      30.37         21.31         20.92         16       18.24
  4.0      30.42         21.25         20.98         13       21.44
  5.0      30.52         21.04         21.10         30       12.08
  6.0      30.61         20.83         21.23         56        5.86
  7.0      30.92         20.30         21.60         79        2.46
  8.0      30.84         20.18         21.57         68        3.86
  9.0      31.15         19.24         22.05         84        1.71
 10.0      31.38         18.56         22.39         88        1.25
 11.0      31.49         18.18         22.57         91         .99
 12.0      31.54         17.74         22.72         91         .97
 13.0      31.61         16.82         22.97         91         .94
 14.0      31.83         14.71         23.61         91         .97
 15.0      31.56         14.04         23.55         91         .97
 16.0      31.72         13.33         23.82         90        1.08
 17.0      31.70         13.28         23.81         90        1.10
 18.0      31.73         13.20         23.85         90        1.10
 19.0      31.76         13.10         23.89         89        1.14
 20.0      31.74         13.02         23.89         89        1.18
 21.0      31.68         12.79         23.88         87        1.42
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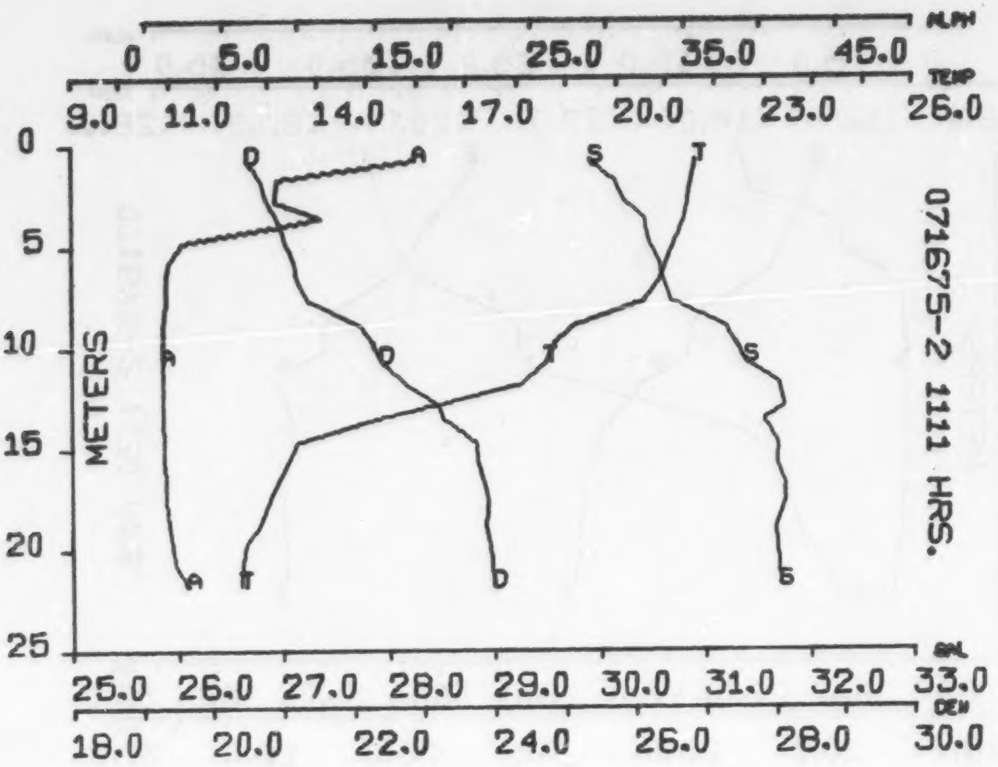
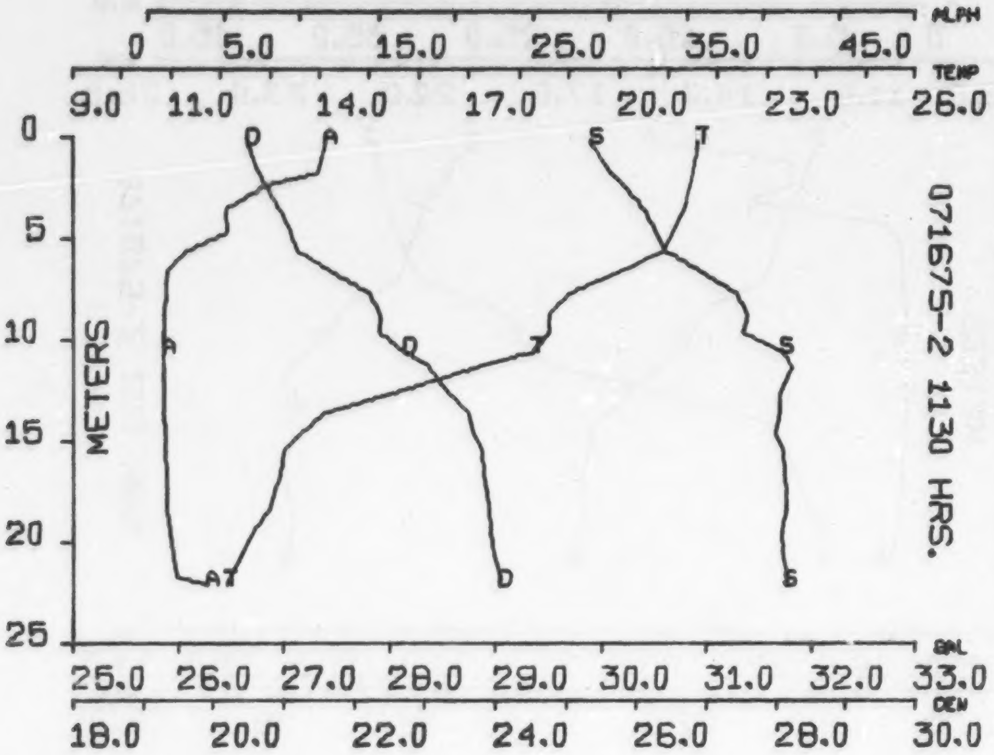


STATION 071675-2 1111 HRS.
AT DROGUES 52 MINUTES AFTER DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	29.73	21.66	20.34	-5	25.49
1.0	29.99	21.54	20.57	24	15.02
2.0	30.19	21.45	20.75	43	8.40
3.0	30.32	21.39	20.86	40	9.26
4.0	30.45	21.26	21.00	49	8.14
5.0	30.52	21.09	21.09	82	2.02
6.0	30.60	20.92	21.20	89	1.21
7.0	30.65	20.72	21.29	89	1.14
8.0	30.84	20.13	21.58	90	1.08
9.0	31.21	19.07	22.14	91	.96
10.0	31.33	18.68	22.32	91	.93
11.0	31.50	18.41	22.52	91	.91
12.0	31.73	17.72	22.86	91	.91
13.0	31.72	16.04	23.25	91	.96
14.0	31.62	14.48	23.50	91	.96
15.0	31.70	13.47	23.77	90	1.03
16.0	31.72	13.27	23.82	90	1.07
17.0	31.77	13.09	23.90	89	1.14
18.0	31.73	12.90	23.91	88	1.24
19.0	31.68	12.69	23.91	87	1.41
20.0	31.70	12.48	23.96	85	1.63
21.0	31.71	12.42	23.98	82	2.05



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*                                                          *
*     STATION  071675-2   1130  HRS.                       *
*     AT SHALLOW DROGUES 71 MINUTES AFTER DISCHARGE        *
*                                                          *
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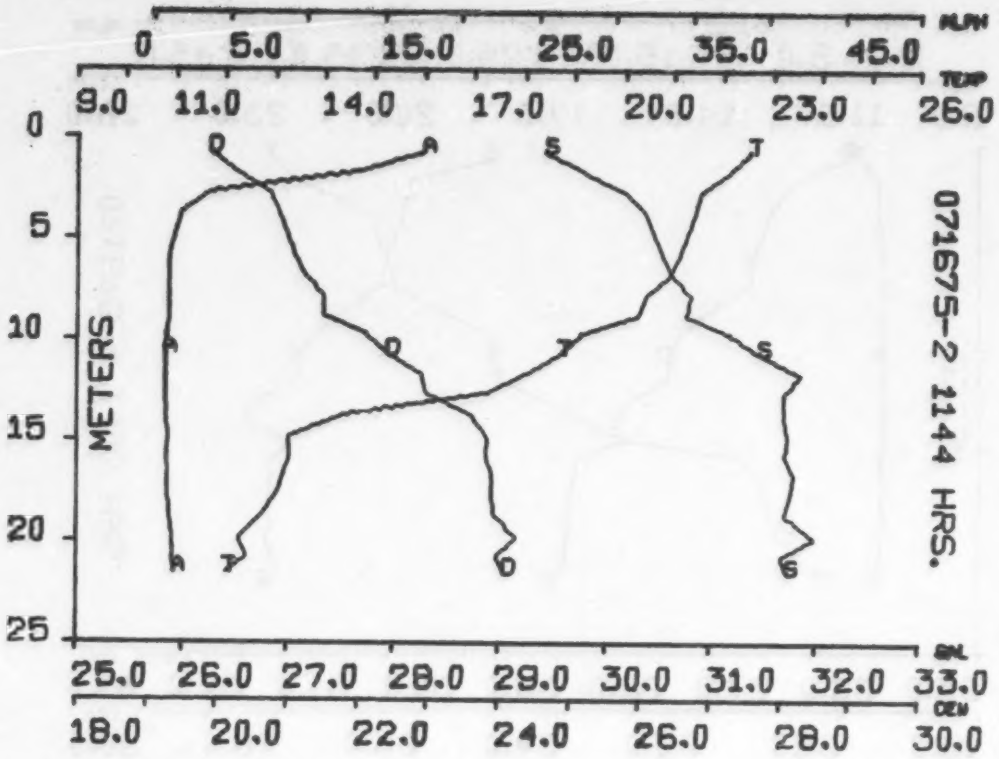
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	29.88	21.61	20.47	31	11.63
1.0	30.01	21.53	20.59	33	11.22
2.0	30.15	21.45	20.71	39	9.48
3.0	30.33	21.35	20.88	55	6.06
4.0	30.47	21.20	21.02	60	5.05
5.0	30.56	20.99	21.15	67	4.08
6.0	30.76	20.50	21.43	83	1.83
7.0	31.08	19.62	21.90	89	1.14
8.0	31.32	18.85	22.27	90	1.02
9.0	31.38	18.58	22.38	91	.95
10.0	31.51	18.44	22.52	91	.93
11.0	31.79	17.64	22.92	91	.93
12.0	31.76	16.29	23.21	91	.94
13.0	31.70	14.93	23.47	91	.96
14.0	31.68	13.88	23.67	90	1.00
15.0	31.69	13.44	23.77	90	1.06
16.0	31.75	13.23	23.85	90	1.11
17.0	31.76	13.13	23.88	89	1.13
18.0	31.77	13.01	23.92	89	1.16
19.0	31.73	12.76	23.93	88	1.31
20.0	31.72	12.53	23.97	86	1.47
21.0	31.76	12.31	24.04	85	1.65
22.0	31.76	12.12	24.07	71	3.40



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****************************************************************
*                                                              *
*    STATION  071675-2   1144  HRS.                            *
*    AT DUMPSITE 85 MINUTES AFTER DISCHARGE                    *
*                                                              *
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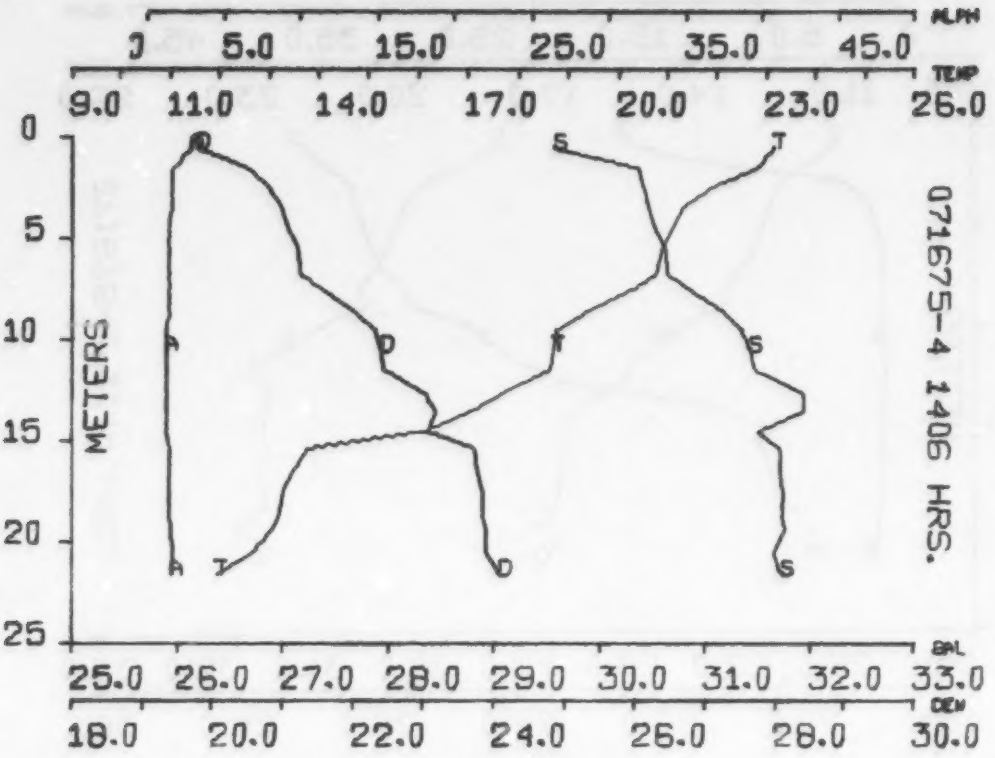
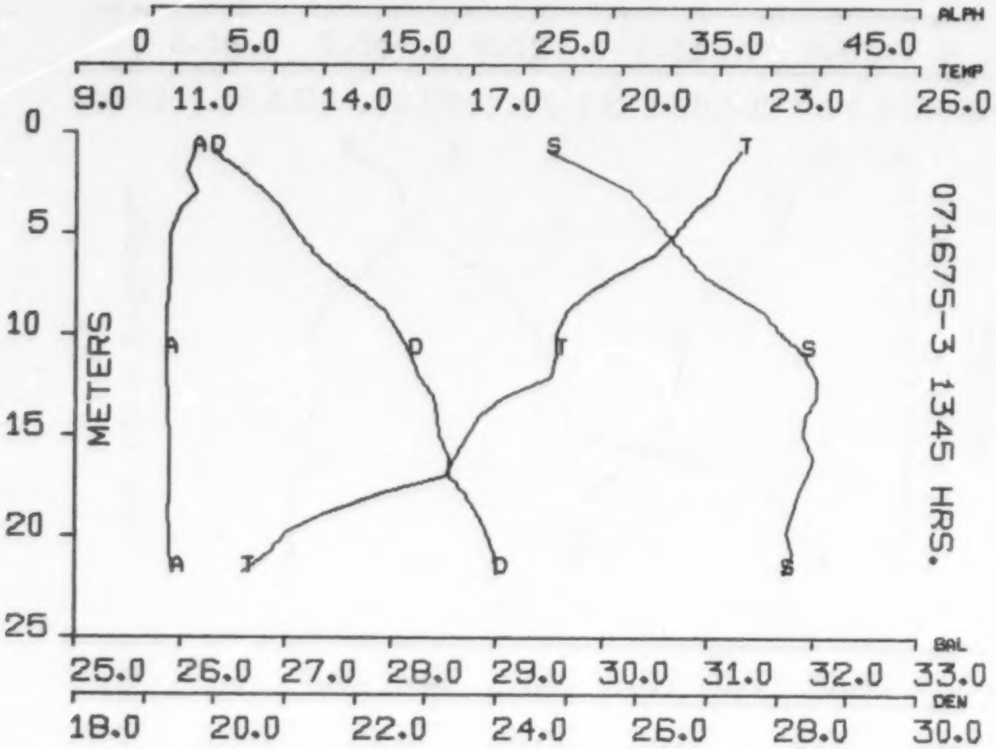
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	29.21	22.78	19.64	11	20.28
1.0	29.57	22.36	20.03	21	15.91
2.0	29.93	21.90	20.43	42	9.87
3.0	30.24	21.48	20.78	74	3.00
4.0	30.40	21.37	20.92	85	1.62
5.0	30.48	21.21	21.03	88	1.23
6.0	30.57	21.04	21.14	91	.95
7.0	30.68	20.78	21.30	91	.92
8.0	30.80	20.37	21.49	91	.93
9.0	30.89	19.92	21.68	91	.92
10.0	31.28	18.99	22.21	92	.83
11.0	31.60	18.46	22.58	93	.75
12.0	31.80	17.70	22.92	93	.73
13.0	31.70	16.13	23.20	93	.77
14.0	31.71	14.01	23.67	92	.84
15.0	31.73	13.26	23.83	91	.90
16.0	31.74	13.24	23.85	92	.88
17.0	31.78	13.09	23.91	91	.94
18.0	31.74	12.89	23.91	90	1.00
19.0	31.81	12.58	24.03	89	1.13
20.0	31.91	12.31	24.15	88	1.24
21.0	31.70	12.28	24.00	88	1.29



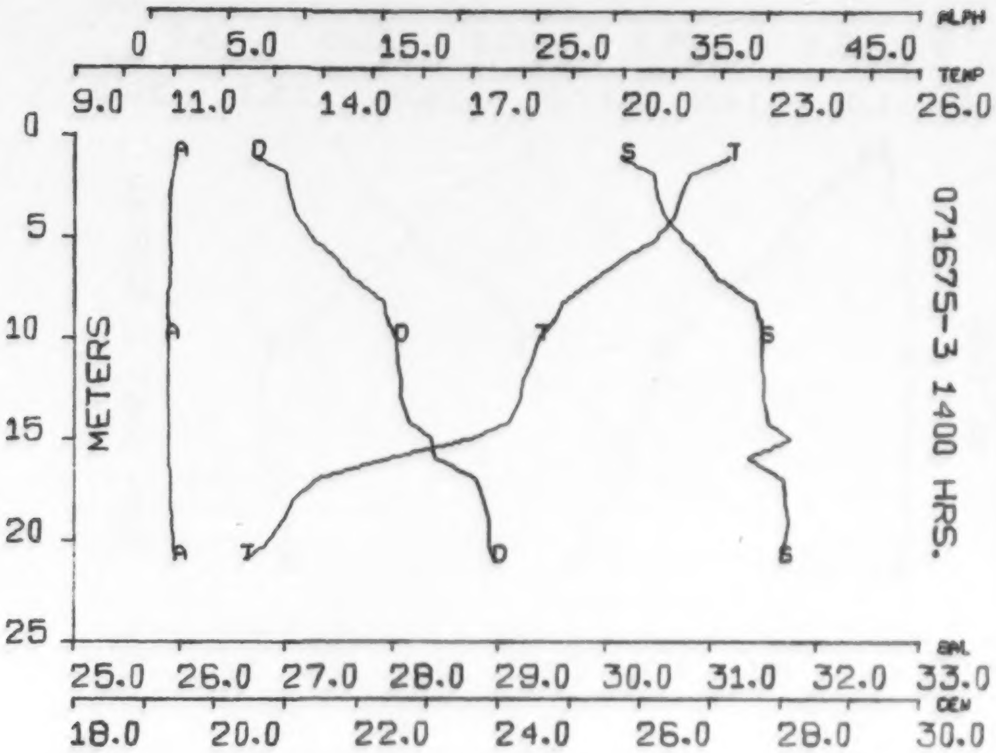
STATION 071675-3 1247 HRS.
AT DUMPSITE 148 MINUTES AFTER DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	29.53	23.10	19.80	2	18.45
1.0	29.82	22.71	20.12	38	10.36
2.0	30.09	22.22	20.46	69	3.76
3.0	30.30	21.54	20.81	85	1.64
4.0	30.49	21.30	21.01	90	1.05
5.0	30.56	21.18	21.10	91	.96
6.0	30.60	21.06	21.16	91	.96
7.0	30.73	20.58	21.39	91	.98
8.0	30.91	19.97	21.68	91	.95
9.0	31.20	19.33	22.06	92	.88
10.0	31.45	18.95	22.35	92	.84
11.0	31.73	18.80	22.60	93	.77
12.0	32.06	18.54	22.92	93	.75
13.0	32.10	18.13	23.04	93	.77
14.0	31.89	17.85	22.95	93	.78
15.0	31.95	17.37	23.11	92	.79
16.0	32.15	16.47	23.47	92	.87
17.0	31.77	15.56	23.38	91	.91
18.0	31.74	13.79	23.74	91	.89
19.0	31.82	13.12	23.93	91	.90
20.0	31.83	12.90	23.98	91	.92
21.0	31.78	12.27	24.06	90	1.08



STATION 071675-3 1345 HRS.
AT SHALLOW DROGUES 206 MINUTES AFTER DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	29.14	22.57	19.65	82	2.02
1.0	29.52	22.34	20.00	79	2.34
2.0	29.91	22.11	20.36	77	2.66
3.0	30.28	21.85	20.71	76	2.81
4.0	30.47	21.39	20.98	85	1.64
5.0	30.62	21.06	21.18	89	1.16
6.0	30.78	20.63	21.41	89	1.17
7.0	30.95	19.90	21.73	89	1.15
8.0	31.26	19.32	22.11	90	1.06
9.0	31.52	18.96	22.40	91	1.00
10.0	31.72	18.77	22.60	91	.97
11.0	31.89	18.65	22.76	91	.95
12.0	32.03	18.58	22.88	91	.95
13.0	32.04	17.72	23.10	90	1.04
14.0	31.93	17.17	23.15	90	1.09
15.0	31.92	16.91	23.20	89	1.15
16.0	32.00	16.68	23.31	89	1.15
17.0	31.94	16.10	23.40	89	1.18
18.0	31.87	15.19	23.54	89	1.16
19.0	31.80	14.05	23.73	89	1.12
20.0	31.80	13.31	23.87	89	1.14
21.0	31.80	12.81	23.98	89	1.21



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****************************************************************
*                                                              *
*    STATION  071675-3   1400  HRS.                            *
*    AT DEEP DROGUES 221 MINUTES AFTER DISCHARGE               *
*                                                              *
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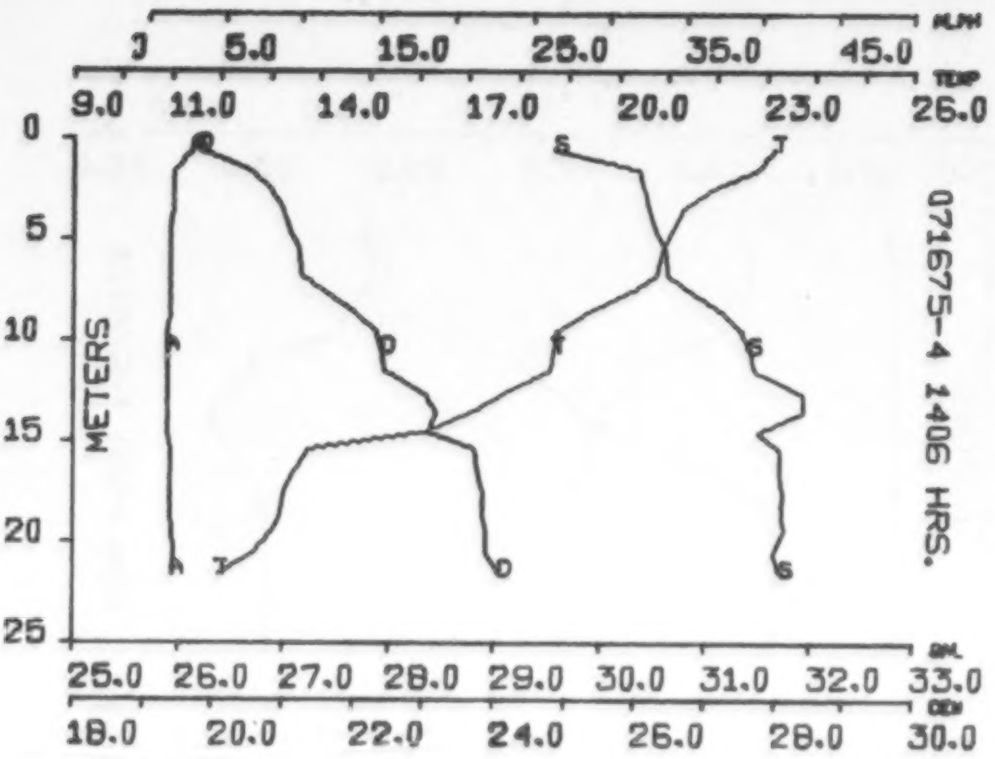
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	29.79	23.12	19.99	83	1.90
1.0	30.17	22.13	20.55	85	1.63
2.0	30.48	21.28	21.01	87	1.36
3.0	30.52	21.12	21.08	89	1.17
4.0	30.59	20.97	21.18	89	1.15
5.0	30.76	20.62	21.40	89	1.17
6.0	30.94	19.97	21.70	89	1.22
7.0	31.11	19.39	21.98	89	1.14
8.0	31.38	18.85	22.32	90	1.08
9.0	31.47	18.60	22.45	90	1.05
10.0	31.50	18.28	22.55	90	1.05
11.0	31.49	18.14	22.58	90	1.04
12.0	31.51	17.98	22.63	90	1.07
13.0	31.51	17.91	22.65	90	1.07
14.0	31.56	17.72	22.73	89	1.13
15.0	31.74	16.86	23.07	89	1.18
16.0	31.41	15.15	23.20	89	1.19
17.0	31.71	13.83	23.71	88	1.23
18.0	31.72	13.38	23.81	88	1.27
19.0	31.76	13.17	23.87	87	1.34
20.0	31.70	12.89	23.89	86	1.49



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***************************************************************
*                                                             *
*     STATION  071675-4   1406  HRS.                          *
*     ABOUT 6 MINUTES AFTER SECOND DISCHARGE                  *
*                                                             *
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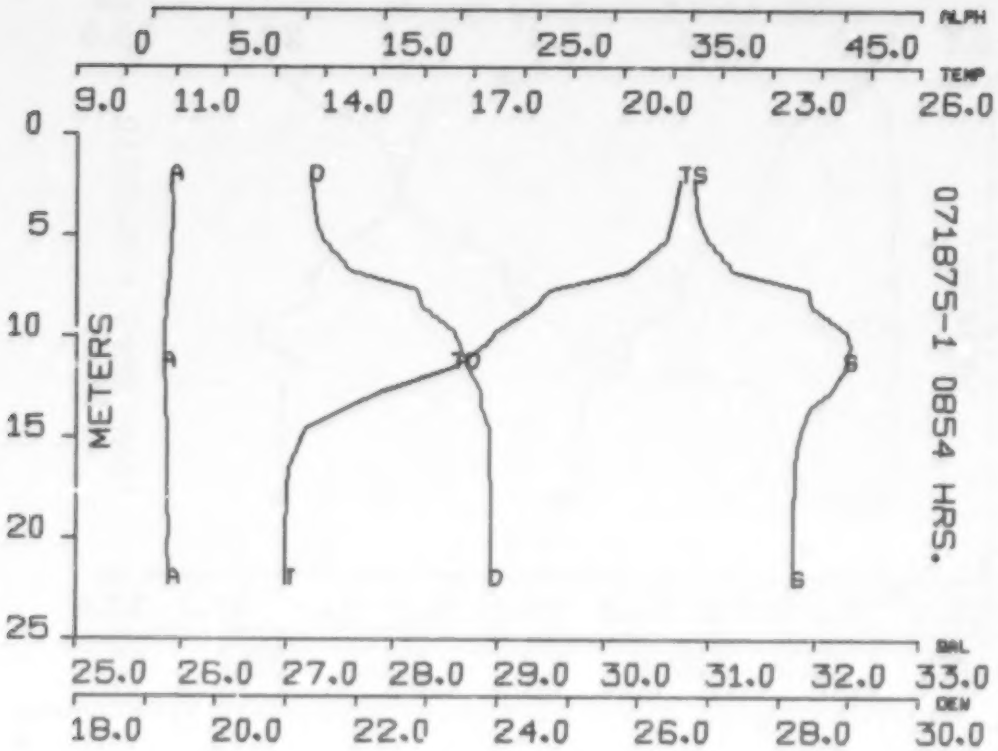
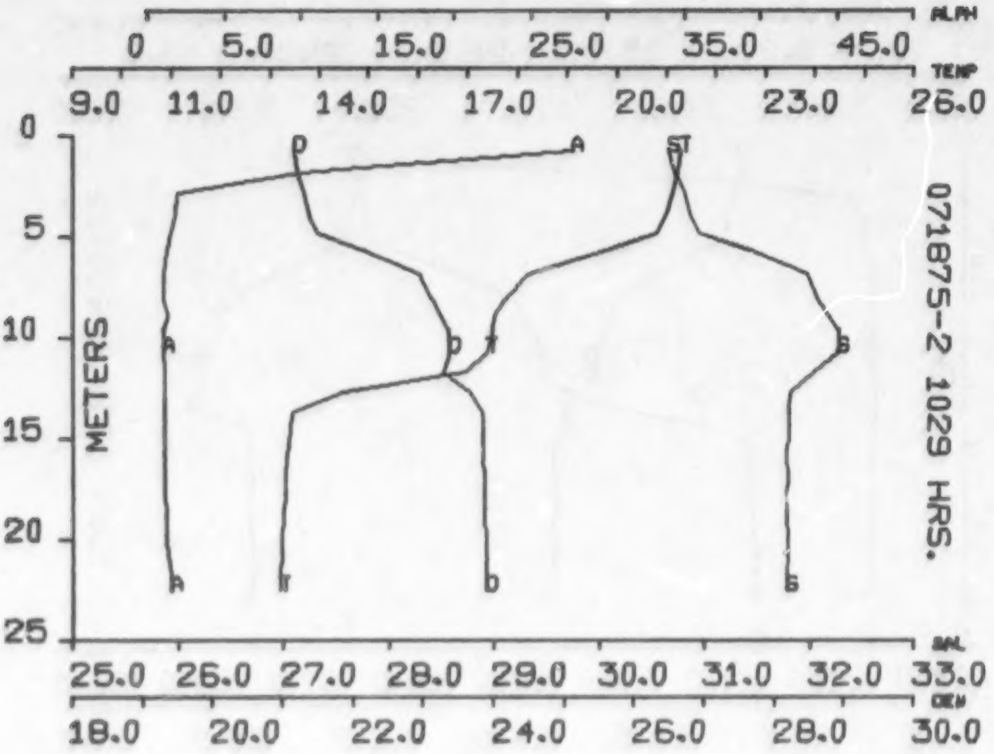
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	29.20	23.33	19.48	72	3.30
1.0	29.96	22.96	20.16	80	2.21
2.0	30.39	22.32	20.66	86	1.53
3.0	30.45	21.55	20.92	86	1.45
4.0	30.50	21.16	21.06	87	1.38
5.0	30.58	20.97	21.17	88	1.27
6.0	30.64	20.83	21.25	88	1.27
7.0	30.73	20.57	21.39	88	1.25
8.0	31.02	19.81	21.80	88	1.28
9.0	31.26	19.07	22.17	88	1.25
10.0	31.40	18.71	22.37	89	1.18
11.0	31.46	18.65	22.43	89	1.16
12.0	31.69	18.16	22.73	89	1.19
13.0	31.95	17.39	23.10	89	1.20
14.0	31.72	16.58	23.12	89	1.17
15.0	31.63	14.76	23.44	88	1.26
16.0	31.73	13.57	23.77	88	1.33
17.0	31.73	13.34	23.82	87	1.35
18.0	31.74	13.21	23.85	87	1.40
19.0	31.76	13.10	23.89	87	1.43
20.0	31.71	12.82	23.90	86	1.50
21.0	31.69	12.33	23.98	86	1.52



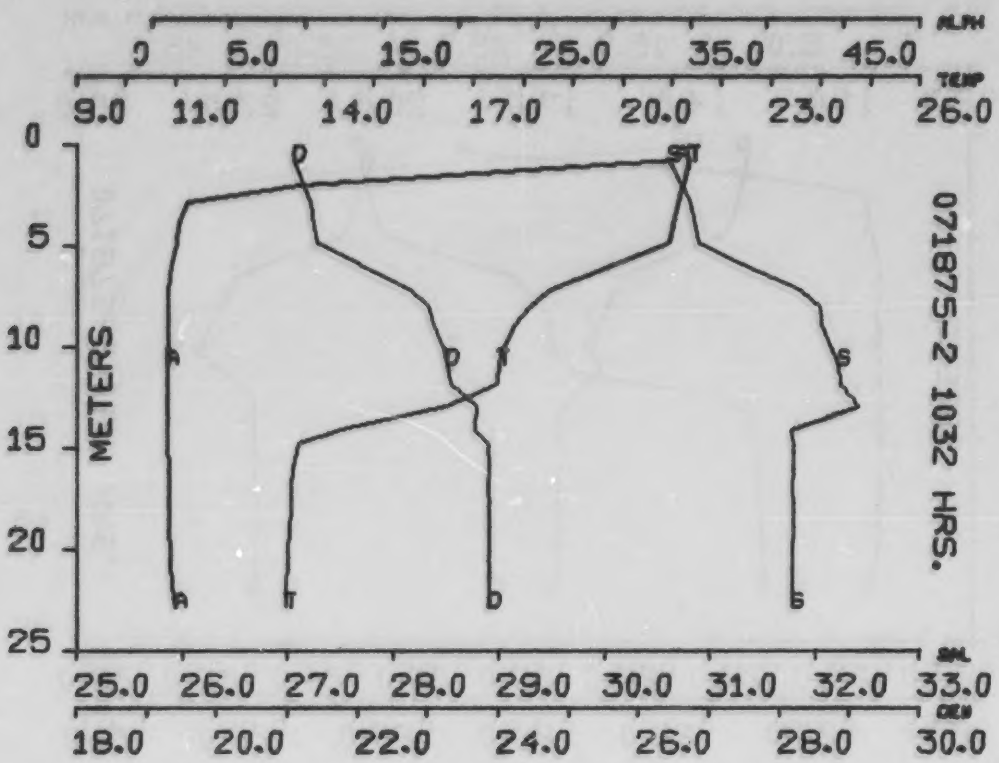
STATION 071875-1 0854 HRS.
AT DUMPSITE BEFORE SLUDGE DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
3.0	30.87	21.08	21.36	88	1.22
4.0	30.90	20.99	21.41	88	1.24
5.0	30.98	20.87	21.50	89	1.17
6.0	31.13	20.43	21.72	89	1.11
7.0	31.46	19.62	22.18	90	1.02
8.0	31.96	18.40	22.87	92	.86
9.0	32.10	17.91	23.10	93	.78
10.0	32.33	17.36	23.40	93	.73
11.0	32.31	16.87	23.51	93	.73
12.0	32.23	15.97	23.64	93	.75
13.0	32.06	14.86	23.76	92	.79
14.0	31.92	14.00	23.83	92	.86
15.0	31.86	13.53	23.88	91	.90
16.0	31.82	13.37	23.88	91	.92
17.0	31.81	13.28	23.89	91	.95
18.0	31.81	13.25	23.90	91	.97
19.0	31.80	13.23	23.90	91	.99
20.0	31.80	13.22	23.90	91	.98
21.0	31.80	13.22	23.90	90	1.00



STATION 071875-2 1029 HRS.
AT DUMPSITE 11 MINUTES AFTER DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	30.62	21.31	21.11	-16	40.17
1.0	30.68	21.25	21.17	14	23.39
2.0	30.75	21.18	21.24	46	8.32
3.0	30.83	21.08	21.33	84	1.80
4.0	30.89	20.97	21.40	85	1.64
5.0	31.07	20.57	21.64	87	1.37
6.0	31.60	19.33	22.37	89	1.11
7.0	32.00	18.13	22.97	91	.98
8.0	32.09	17.71	23.14	91	.96
9.0	32.20	17.50	23.27	89	1.20
10.0	32.28	17.42	23.35	91	.95
11.0	32.20	17.21	23.34	91	.98
12.0	31.97	16.11	23.41	90	1.03
13.0	31.81	14.09	23.73	90	1.01
14.0	31.80	13.39	23.86	90	1.04
15.0	31.80	13.35	23.87	90	1.06
16.0	31.79	13.31	23.87	90	1.07
17.0	31.80	13.29	23.88	90	1.09
18.0	31.79	13.27	23.88	89	1.13
19.0	31.79	13.23	23.89	89	1.19
20.0	31.79	13.21	23.89	89	1.20
21.0	31.80	13.20	23.90	88	1.32
22.0	31.79	13.19	23.90	86	1.50



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*************************************************************
*                                                           *
*    STATION  071875-2   1032  HRS.                         *
*    AT DUMPSITE 14 MINUTES AFTER DISCHARGE                 *
*                                                           *
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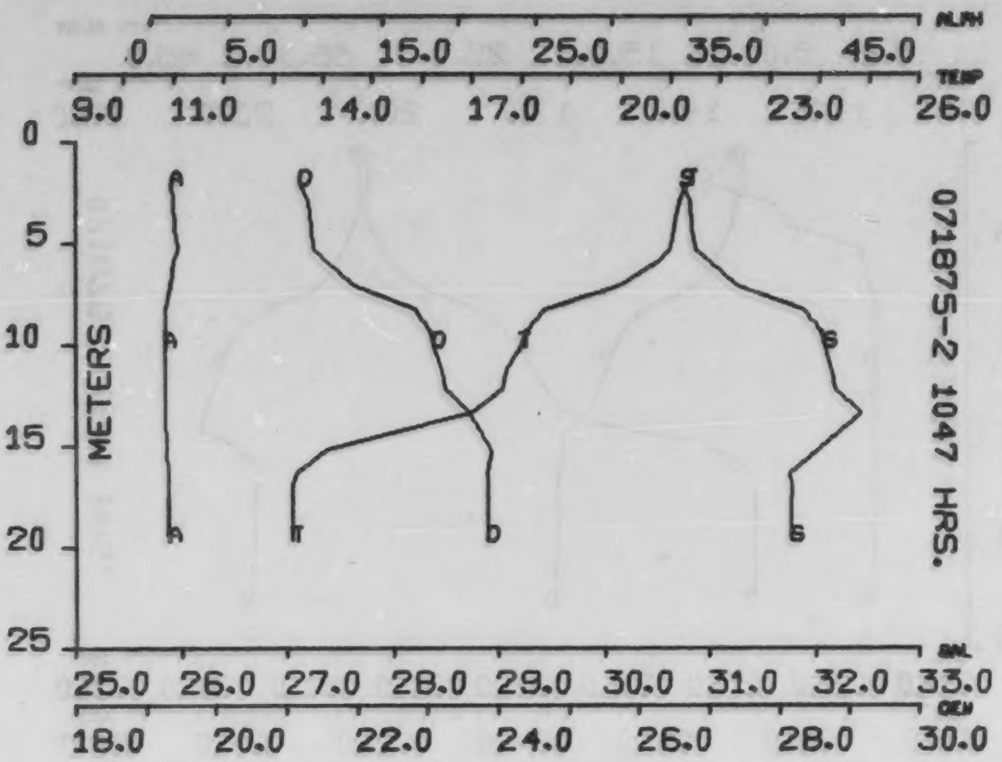
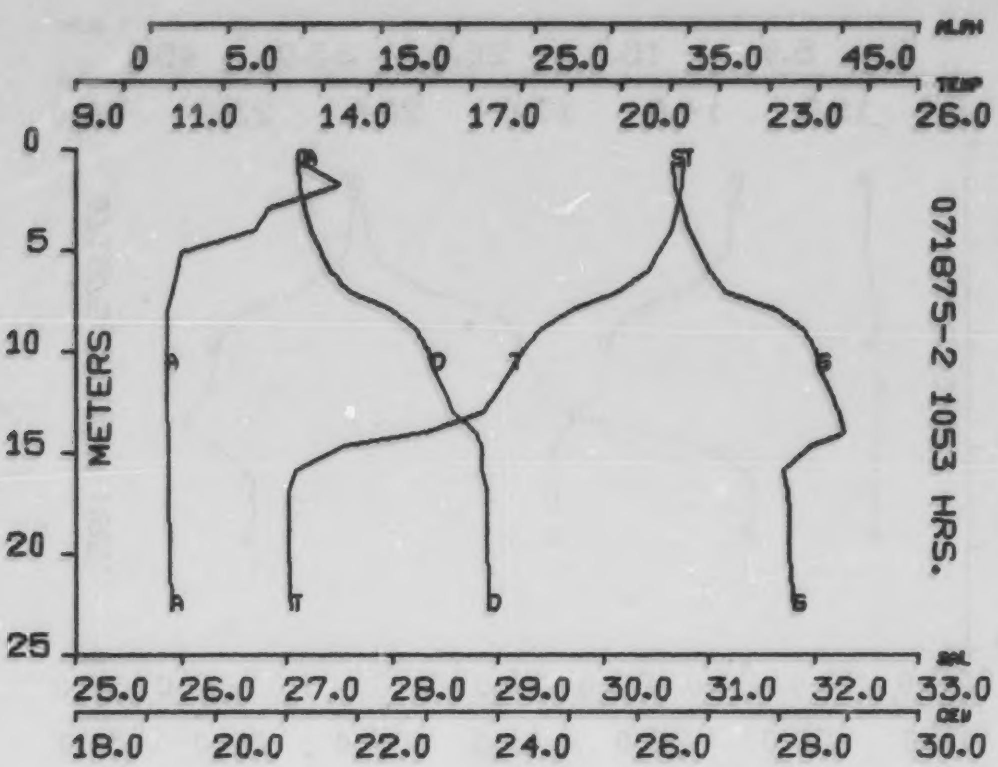
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	30.53	21.40	21.02	-20	50.06
1.0	30.64	21.31	21.13	10	29.46
2.0	30.75	21.21	21.23	40	9.27
3.0	30.83	21.08	21.33	81	2.09
4.0	30.87	21.01	21.38	85	1.65
5.0	30.97	20.74	21.53	87	1.43
6.0	31.36	19.73	22.08	90	1.10
7.0	31.79	18.71	22.66	91	.95
8.0	32.06	18.12	23.02	91	.89
9.0	32.08	17.81	23.11	91	.91
10.0	32.17	17.58	23.23	91	.90
11.0	32.23	17.50	23.30	91	.89
12.0	32.28	17.28	23.38	91	.92
13.0	32.35	16.22	23.68	91	.98
14.0	31.80	14.40	23.66	91	.97
15.0	31.80	13.44	23.85	91	.99
16.0	31.80	13.36	23.87	90	1.03
17.0	31.79	13.33	23.87	90	1.05
18.0	31.79	13.31	23.87	90	1.05
19.0	31.80	13.27	23.88	90	1.09
20.0	31.79	13.24	23.88	89	1.15
21.0	31.79	13.23	23.89	89	1.17
22.0	31.79	13.22	23.89	88	1.27



STATION 071875-2 1047 HRS.
AT DUMPSITE 29 MINUTES AFTER DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
3.0	30.83	21.14	21.31	87	1.40
4.0	30.84	21.05	21.34	87	1.45
5.0	30.86	20.98	21.38	85	1.65
6.0	31.03	20.62	21.61	87	1.37
7.0	31.25	19.97	21.94	89	1.14
8.0	31.76	18.74	22.63	91	.90
9.0	32.02	18.17	22.97	92	.86
10.0	32.10	17.94	23.09	92	.87
11.0	32.15	17.69	23.19	92	.86
12.0	32.19	17.59	23.25	92	.86
13.0	32.38	17.10	23.51	92	.87
14.0	32.28	15.83	23.71	91	.90
15.0	32.05	14.25	23.88	91	.94
16.0	31.83	13.57	23.85	91	.98
17.0	31.79	13.35	23.86	90	1.03
18.0	31.77	13.34	23.85	90	1.08
19.0	31.77	13.33	23.85	90	1.08



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*******************************************************
*                                                     *
*    STATION  071875-2   1053  HRS.                   *
*    AT DROGUES 35 MINUTES AFTER DISCHARGE            *
*                                                     *
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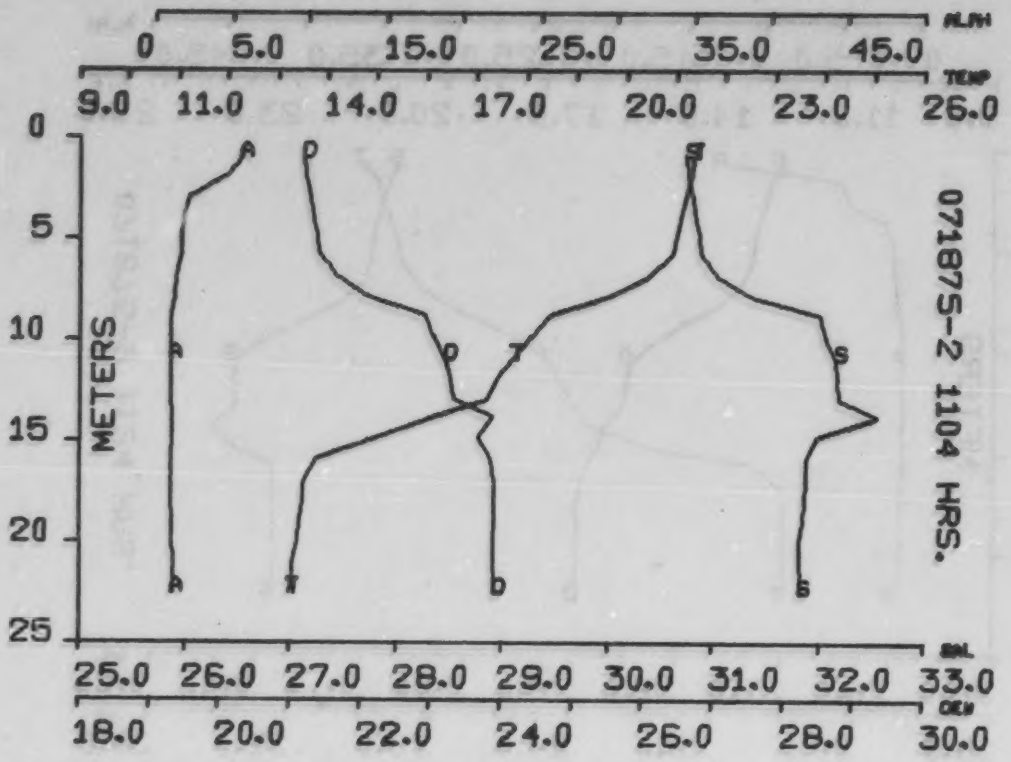
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	30.66	21.28	21.15	42	8.29
1.0	30.67	21.23	21.17	35	10.53
2.0	30.70	21.18	21.21	33	11.42
3.0	30.76	21.09	21.28	47	7.52
4.0	30.83	20.99	21.35	52	6.52
5.0	30.94	20.75	21.50	81	2.14
6.0	31.03	20.51	21.63	86	1.55
7.0	31.17	19.93	21.88	88	1.32
8.0	31.67	18.93	22.53	91	.99
9.0	31.92	18.34	22.86	91	.97
10.0	32.02	17.98	23.02	91	.99
11.0	32.07	17.72	23.12	91	.98
12.0	32.18	17.47	23.26	91	.96
13.0	32.26	17.17	23.39	91	.98
14.0	32.27	15.95	23.68	90	1.03
15.0	31.89	14.10	23.79	90	1.02
16.0	31.72	13.40	23.80	90	1.03
17.0	31.76	13.29	23.85	90	1.08
18.0	31.77	13.28	23.86	90	1.10
19.0	31.77	13.28	23.86	89	1.12
20.0	31.77	13.28	23.86	90	1.11
21.0	31.79	13.32	23.87	89	1.19
22.0	31.80	13.32	23.87	88	1.23



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*                                                           *
*    STATION  071875-2   1104  HRS.                         *
*    AT DROGUES 46 MINUTES AFTER DISCHARGE                  *
*                                                           *
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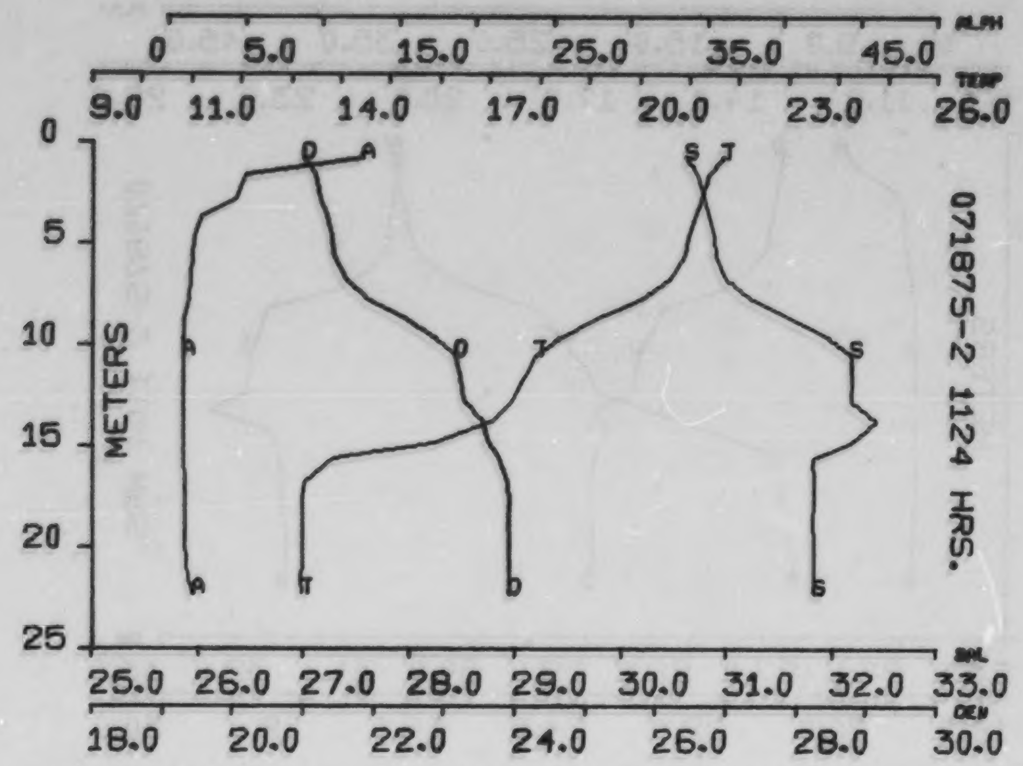
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	30.73	21.34	21.18	53	6.37
1.0	30.74	21.32	21.20	58	5.45
2.0	30.76	21.29	21.22	66	4.23
3.0	30.80	21.16	21.29	81	2.06
4.0	30.84	21.07	21.34	84	1.77
5.0	30.88	20.98	21.39	85	1.62
6.0	30.94	20.80	21.48	86	1.48
7.0	31.10	20.30	21.74	88	1.26
8.0	31.47	19.42	22.25	90	1.09
9.0	32.04	18.37	22.94	91	.95
10.0	32.09	18.02	23.06	91	.94
11.0	32.17	17.66	23.21	91	.94
12.0	32.18	17.37	23.29	91	.91
13.0	32.25	17.06	23.41	91	.91
14.0	32.41	15.83	23.81	90	1.01
15.0	31.94	14.70	23.70	90	1.00
16.0	31.87	13.71	23.86	91	.97
17.0	31.88	13.49	23.90	91	.99
18.0	31.86	13.47	23.89	91	.99
19.0	31.84	13.41	23.89	90	1.02
20.0	31.81	13.37	23.88	90	1.06
21.0	31.81	13.30	23.89	89	1.11
22.0	31.83	13.26	23.91	90	1.10



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*                                                    *
*    STATION  071875-2   1124  HRS.                  *
*    AT DROGUES 66 MINUTES AFTER DISCHARGE           *
*                                                    *
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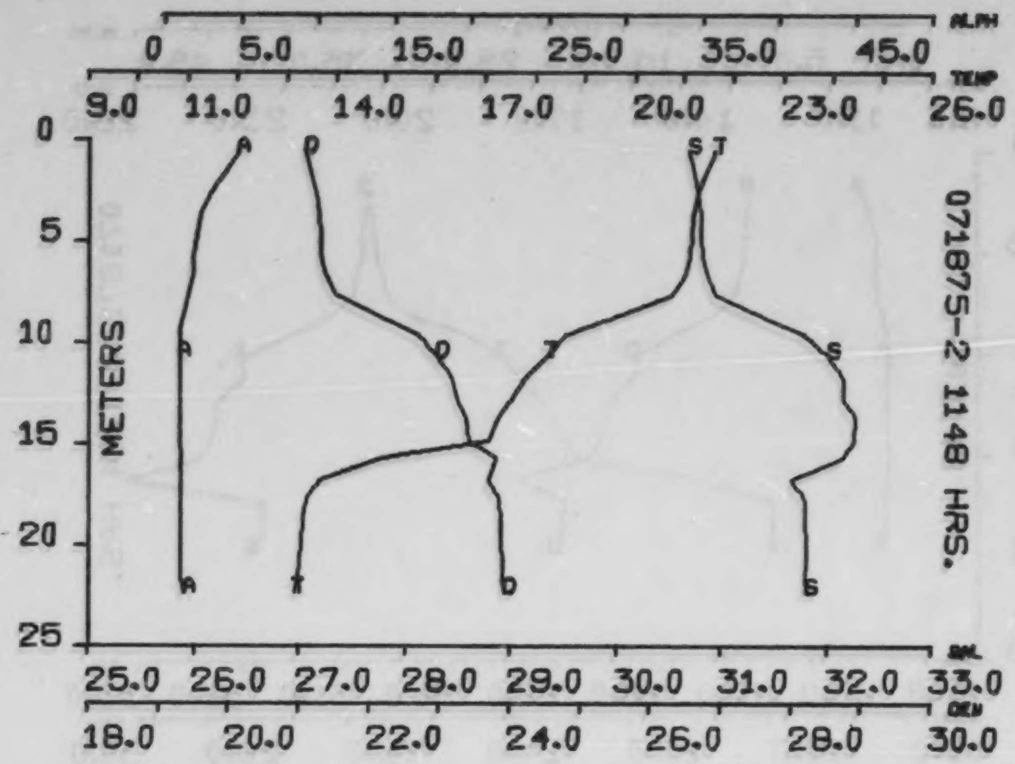
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	30.51	21.97	20.85	-3	19.78
1.0	30.64	21.60	21.05	38	10.41
2.0	30.74	21.33	21.20	63	4.67
3.0	30.80	21.20	21.28	70	3.69
4.0	30.86	21.04	21.36	83	1.86
5.0	30.90	20.94	21.42	86	1.54
6.0	30.94	20.79	21.49	87	1.43
7.0	31.06	20.46	21.67	88	1.30
8.0	31.34	19.78	22.05	89	1.17
9.0	31.72	18.90	22.56	91	.95
10.0	32.05	18.21	22.99	91	.94
11.0	32.19	17.79	23.19	91	.96
12.0	32.19	17.57	23.25	91	.95
13.0	32.23	17.33	23.34	91	.92
14.0	32.37	16.78	23.57	91	.92
15.0	32.10	15.41	23.67	91	.98
16.0	31.82	13.63	23.83	91	.98
17.0	31.83	13.25	23.91	90	1.02
18.0	31.82	13.22	23.91	90	1.07
19.0	31.82	13.21	23.91	90	1.10
20.0	31.83	13.20	23.92	90	1.10
21.0	31.83	13.20	23.92	89	1.19
22.0	31.83	13.20	23.92	86	1.46



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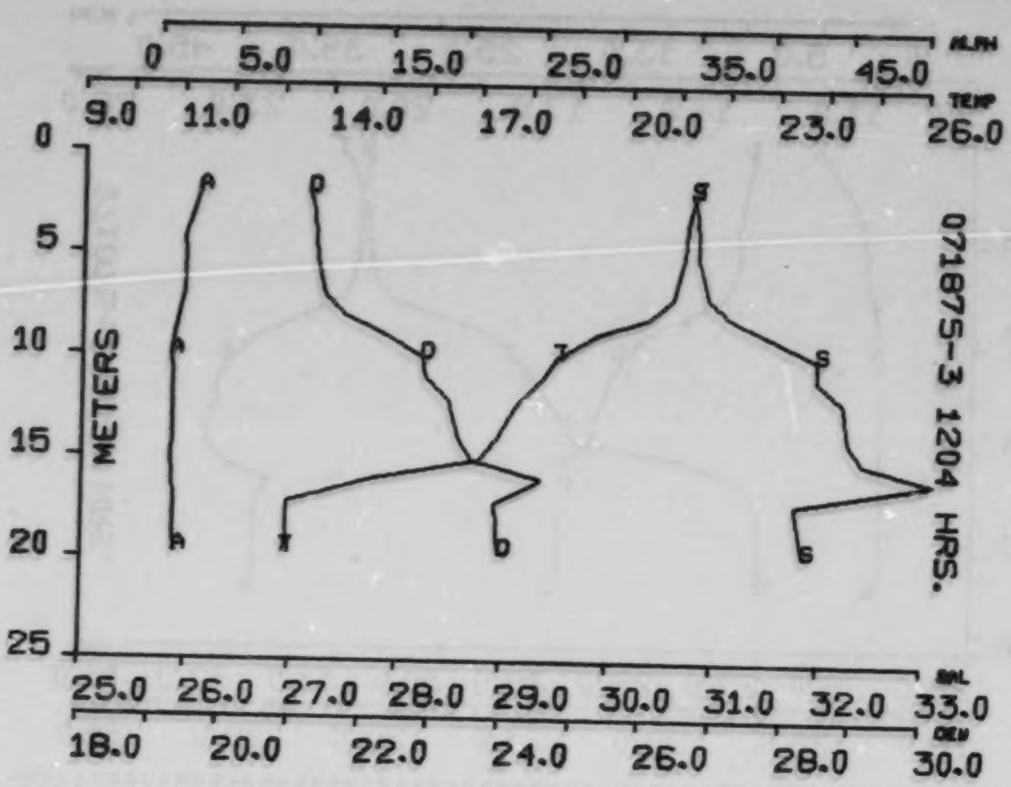
****************************************************************
*                                                              *
*    STATION  071875-2   1148  HRS.                            *
*    AT DUMPSITE 90 MINUTES AFTER DISCHARGE                    *
*                                                              *
****************************************************************
```

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	30.68	21.69	21.05	58	5.33
1.0	30.72	21.53	21.13	64	4.44
2.0	30.76	21.36	21.20	70	3.54
3.0	30.79	21.23	21.26	76	2.71
4.0	30.81	21.16	21.29	80	2.18
5.0	30.82	21.13	21.31	82	2.01
6.0	30.84	21.07	21.34	83	1.84
7.0	30.90	20.90	21.43	84	1.70
8.0	31.11	20.34	21.73	88	1.33
9.0	31.53	19.25	22.34	91	.99
10.0	31.87	18.47	22.79	91	.97
11.0	32.06	18.07	23.03	91	.98
12.0	32.16	17.70	23.20	91	.94
13.0	32.19	17.44	23.28	91	.96
14.0	32.27	17.19	23.40	91	.91
15.0	32.23	16.59	23.51	91	.93
16.0	31.99	14.51	23.78	90	1.04
17.0	31.69	13.60	23.74	90	1.02
18.0	31.80	13.37	23.87	90	1.02
19.0	31.80	13.30	23.88	90	1.05
20.0	31.81	13.28	23.89	90	1.05
21.0	31.82	13.25	23.90	90	1.06
22.0	31.81	13.18	23.91	89	1.16



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****************************************************************
*                                                              *
*    STATION  071875-3   1204  HRS.                            *
*    AT DUMPSITE 106 MINUTES AFTER DISCHARGE                   *
*                                                              *
****************************************************************

DEPTH    SALINITY    TEMPERATURE     SIGMA-T     TRANSMIT.    ALPHA
 (M)      (PPT)          (C)                        (%)       (M-1)
   0      30.69         21.61         21.08          70        3.48
 1.0      30.73         21.47         21.15          74        3.04
 2.0      30.78         21.33         21.23          77        2.60
 3.0      30.82         21.20         21.29          81        2.16
 4.0      30.83         21.15         21.31          84        1.72
 5.0      30.84         21.11         21.33          84        1.69
 6.0      30.89         21.00         21.40          84        1.69
 7.0      30.93         20.90         21.45          85        1.60
 8.0      31.14         20.42         21.74          88        1.32
 9.0      31.57         19.24         22.37          91        1.00
10.0      31.96         18.56         22.84          92         .86
11.0      31.97         18.29         22.91          91         .90
12.0      32.19         17.89         23.17          91         .90
13.0      32.26         17.61         23.29          91         .89
14.0      32.29         17.35         23.37          91         .91
15.0      32.41         17.02         23.55          92         .88
16.0      33.09         14.91         24.54          91         .99
17.0      31.95         13.39         23.98          91        1.00
18.0      31.81         13.15         23.92          90        1.02
19.0      31.83         13.13         23.94          90        1.07
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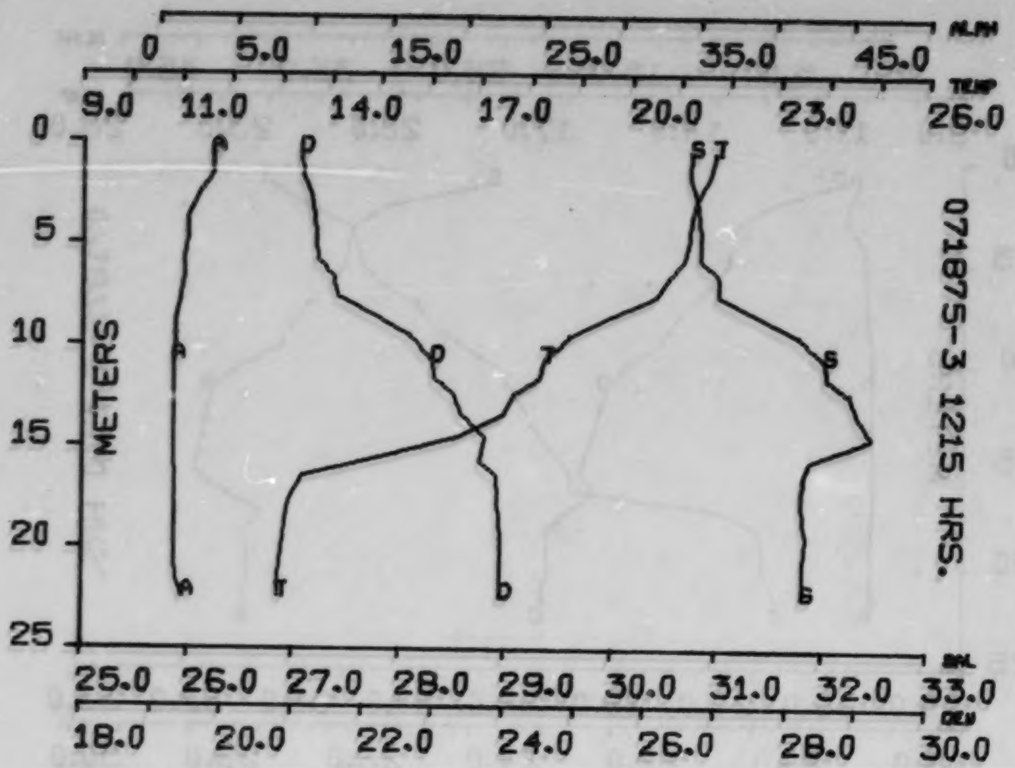

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**********************************************************
*                                                        *
*   STATION  071875-3   1215  HRS.                       *
*   AT DUMPSITE 117 MINUTES AFTER DISCHARGE              *
*                                                        *
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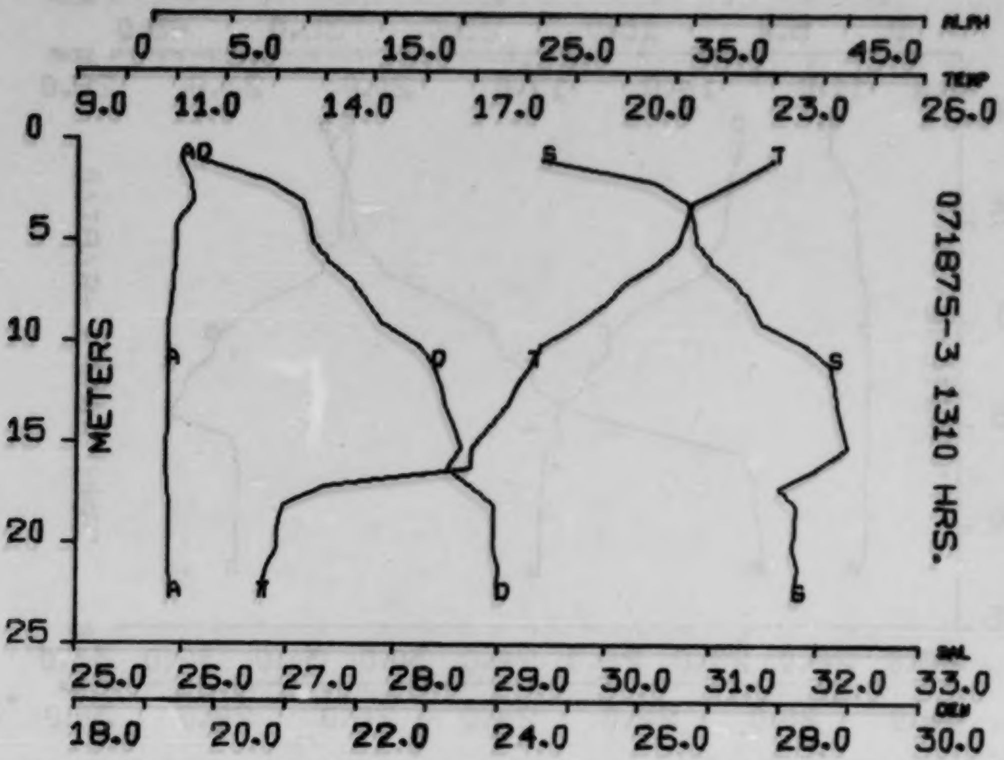
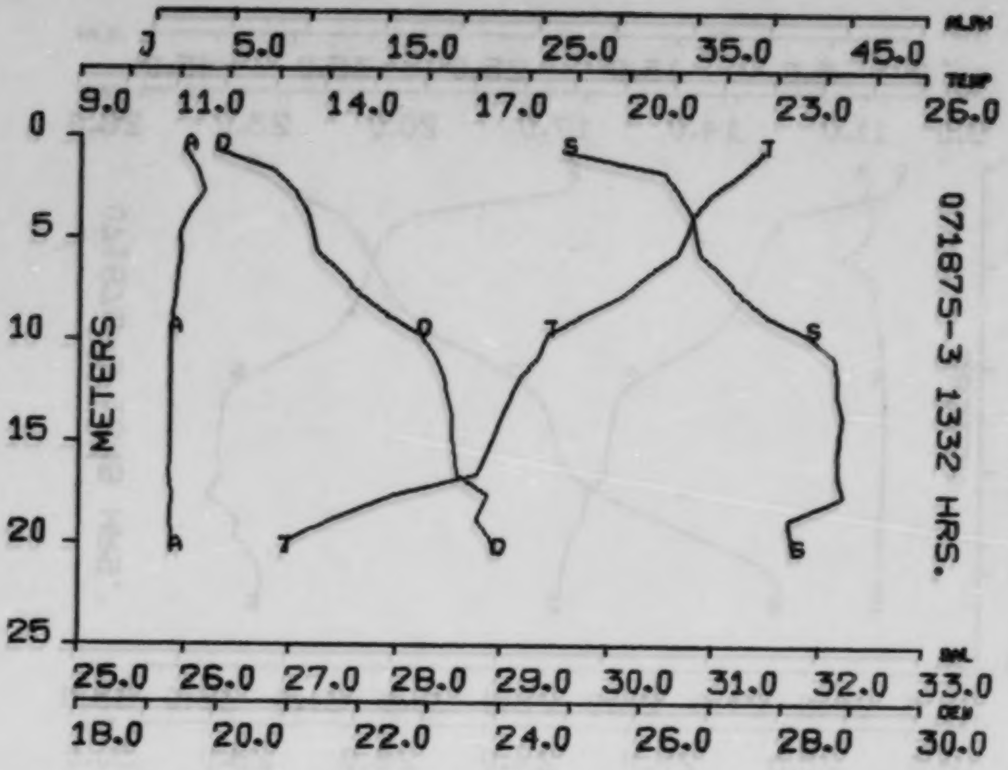
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	30.76	21.74	21.10	71	3.49
1.0	30.74	21.64	21.11	71	3.49
2.0	30.75	21.48	21.16	73	3.10
3.0	30.80	21.29	21.25	80	2.26
4.0	30.83	21.21	21.29	83	1.81
5.0	30.84	21.14	21.32	84	1.75
6.0	30.89	20.98	21.41	85	1.62
7.0	31.01	20.67	21.58	86	1.47
8.0	31.18	20.12	21.84	88	1.24
9.0	31.59	19.18	22.39	90	1.03
10.0	31.87	18.57	22.76	90	1.00
11.0	32.03	18.23	22.97	91	.96
12.0	32.15	17.91	23.14	91	.94
13.0	32.30	17.52	23.35	91	.94
14.0	32.41	16.92	23.57	91	.92
15.0	32.23	15.78	23.69	91	.93
16.0	31.84	14.13	23.75	91	.99
17.0	31.80	13.27	23.89	90	1.04
18.0	31.80	13.12	23.92	90	1.05
19.0	31.82	13.07	23.94	90	1.08
20.0	31.83	13.03	23.95	90	1.09
21.0	31.81	12.98	23.95	89	1.15
22.0	31.81	12.94	23.96	87	1.43



STATION 071875-3 1310 HRS.
AT SHALLOW DROGUES 172 MINUTES AFTER DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	28.43	23.67	18.80	88	1.26
1.0	29.39	22.97	19.73	83	1.85
2.0	30.36	22.27	20.65	78	2.44
3.0	30.76	21.40	21.19	77	2.58
4.0	30.83	21.21	21.30	85	1.59
5.0	30.86	21.08	21.35	86	1.50
6.0	31.00	20.67	21.57	87	1.38
7.0	31.22	20.07	21.89	88	1.26
8.0	31.38	19.61	22.13	89	1.15
9.0	31.47	19.09	22.33	91	.98
10.0	31.84	18.44	22.78	91	.96
11.0	32.10	18.15	23.04	91	.96
12.0	32.18	17.87	23.16	91	.95
13.0	32.20	17.70	23.23	91	.93
14.0	32.25	17.37	23.34	91	.90
15.0	32.30	17.03	23.46	92	.87
16.0	32.06	16.93	23.30	92	.87
17.0	31.71	14.59	23.55	91	.97
18.0	31.80	13.24	23.89	90	1.02
19.0	31.80	13.08	23.93	90	1.03
20.0	31.79	13.04	23.92	90	1.03
21.0	31.83	12.87	23.99	90	1.08
22.0	31.80	12.77	23.99	89	1.15



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************************************************************
*                                                          *
*    STATION  071875-3   1332  HRS.                        *
*    AT SHALLOW DROGUES 194 MINUTES AFTER DISCHARGE        *
*                                                          *
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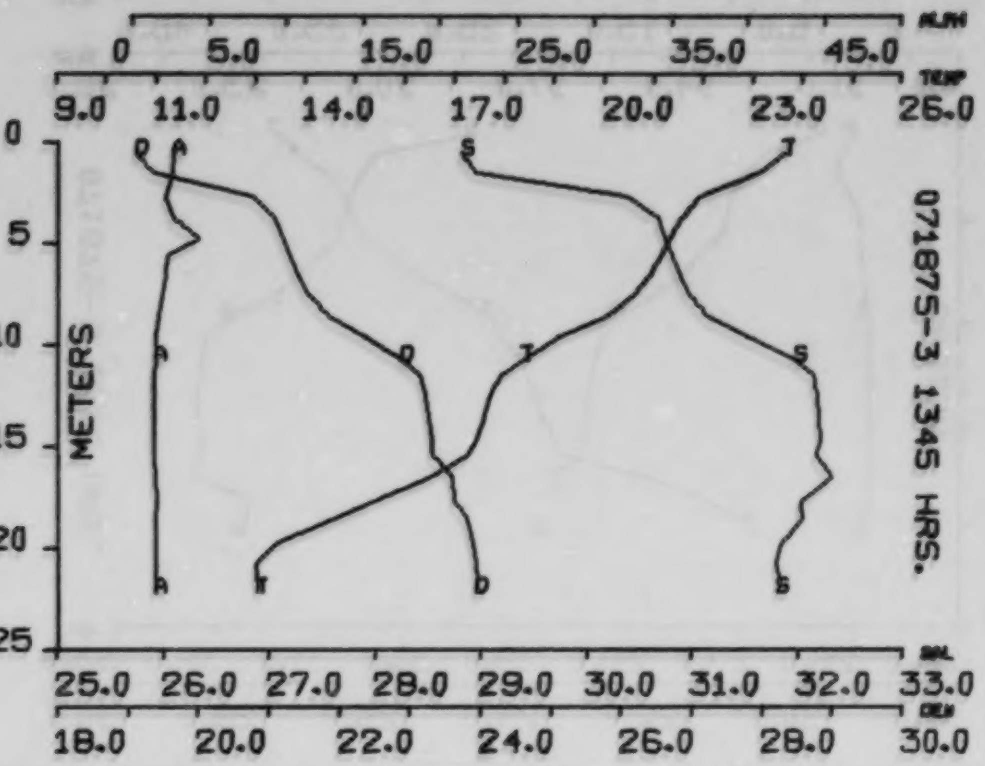
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	28.96	23.00	19.40	88	1.27
1.0	29.91	22.55	20.24	81	2.14
2.0	30.57	22.06	20.87	75	2.86
3.0	30.71	21.56	21.11	76	2.80
4.0	30.80	21.27	21.26	83	1.90
5.0	30.84	21.11	21.33	86	1.54
6.0	30.94	20.76	21.50	86	1.47
7.0	31.14	20.22	21.79	88	1.31
8.0	31.33	19.66	22.08	89	1.19
9.0	31.62	18.88	22.50	90	1.00
10.0	31.98	18.34	22.90	91	.96
11.0	32.16	18.13	23.09	91	.96
12.0	32.18	17.80	23.19	91	.95
13.0	32.20	17.61	23.25	91	.93
14.0	32.22	17.44	23.30	91	.93
15.0	32.20	17.27	23.33	91	.92
16.0	32.19	17.09	23.36	91	.89
17.0	32.21	16.32	23.55	91	.95
18.0	32.06	14.91	23.75	90	1.03
19.0	31.71	13.89	23.69	90	1.00
20.0	31.76	13.19	23.87	90	1.01



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*****************************************************************
*                                                               *
*    STATION  071875-3   1345  HRS.                             *
*    AT DUMPSITE 207 MINUTES AFTER DISCHARGE                    *
*                                                               *
*****************************************************************
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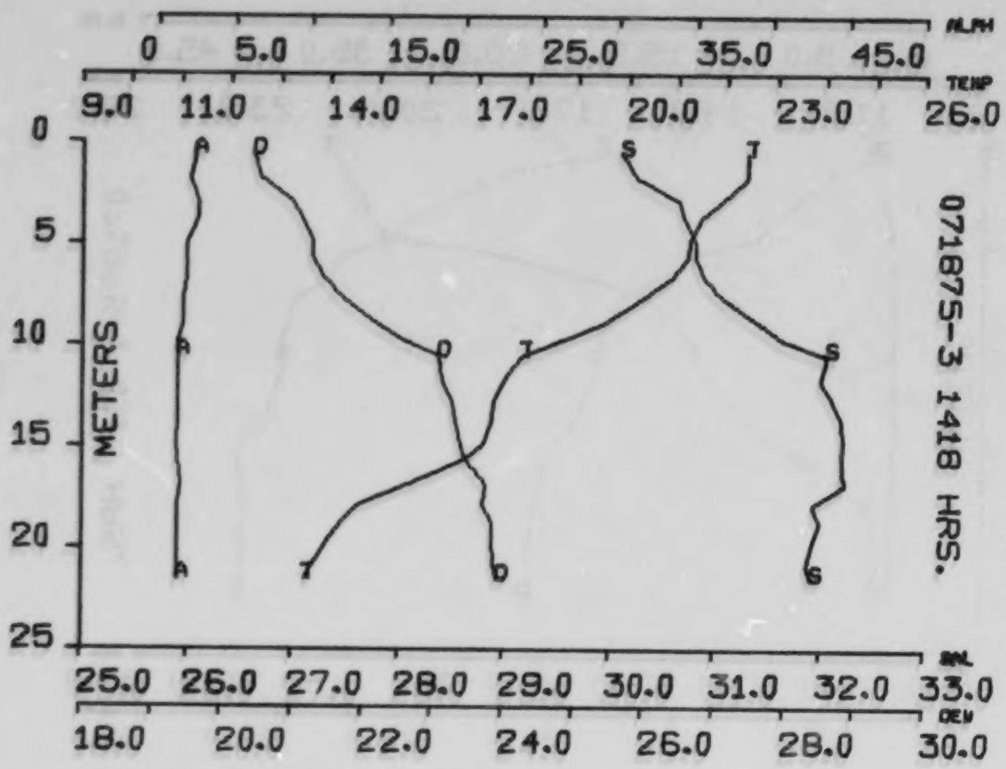
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	28.74	23.98	18.95	77	2.67
1.0	28.89	23.41	19.23	78	2.52
2.0	29.55	22.63	19.94	80	2.26
3.0	30.46	21.81	20.87	80	2.17
4.0	30.71	21.48	21.13	74	3.04
5.0	30.77	21.26	21.24	70	3.66
6.0	30.85	21.05	21.36	81	2.11
7.0	30.94	20.77	21.50	83	1.89
8.0	31.07	20.34	21.71	84	1.70
9.0	31.31	19.66	22.07	86	1.53
10.0	31.69	18.83	22.56	87	1.36
11.0	32.05	18.20	22.99	88	1.32
12.0	32.18	17.79	23.19	88	1.30
13.0	32.21	17.63	23.25	88	1.29
14.0	32.23	17.51	23.29	88	1.29
15.0	32.21	17.34	23.32	88	1.29
16.0	32.26	16.84	23.47	88	1.32
17.0	32.21	16.01	23.63	87	1.40
18.0	32.05	15.02	23.71	86	1.45
19.0	31.98	14.09	23.86	87	1.38
20.0	31.83	13.27	23.91	87	1.36
21.0	31.81	12.98	23.95	87	1.38
22.0	31.83	13.01	23.96	87	1.37



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*************************************************************
*                                                           *
*    STATION  071875-3   1418  HRS.                         *
*    NEAR SHALLOW DROGUES 240 MINUTES AFTER DISCHARG        *
*                                                           *
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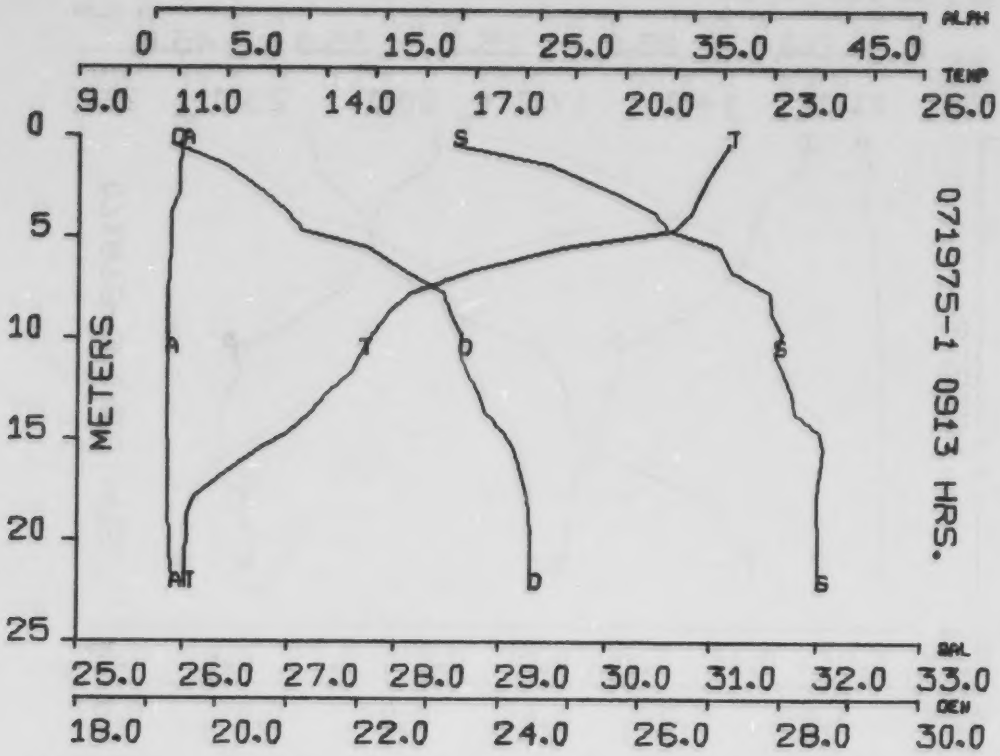
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	30.05	22.38	20.39	77	2.55
1.0	30.17	22.39	20.47	80	2.25
2.0	30.34	22.28	20.63	81	2.15
3.0	30.67	21.83	21.01	77	2.61
4.0	30.73	21.41	21.17	78	2.45
5.0	30.82	21.22	21.28	83	1.81
6.0	30.85	21.07	21.35	83	1.81
7.0	30.97	20.65	21.55	84	1.73
8.0	31.19	20.06	21.87	85	1.59
9.0	31.46	19.37	22.25	86	1.53
10.0	31.79	18.38	22.75	88	1.28
11.0	32.04	17.71	23.10	88	1.27
12.0	32.05	17.43	23.17	88	1.24
13.0	32.15	17.30	23.28	88	1.24
14.0	32.22	17.22	23.35	88	1.22
15.0	32.23	16.99	23.42	89	1.21
16.0	32.23	16.34	23.56	88	1.34
17.0	32.19	15.37	23.75	86	1.49
18.0	31.94	14.50	23.74	88	1.29
19.0	31.99	14.13	23.86	88	1.28
20.0	31.93	13.86	23.87	88	1.26
21.0	31.89	13.62	23.89	88	1.26



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***************************************************************
*                                                             *
*     STATION  071975-1    0913   HRS.                        *
*     AT DUMPSITE BEFORE SLUDGE DISCHARGE                     *
*                                                             *
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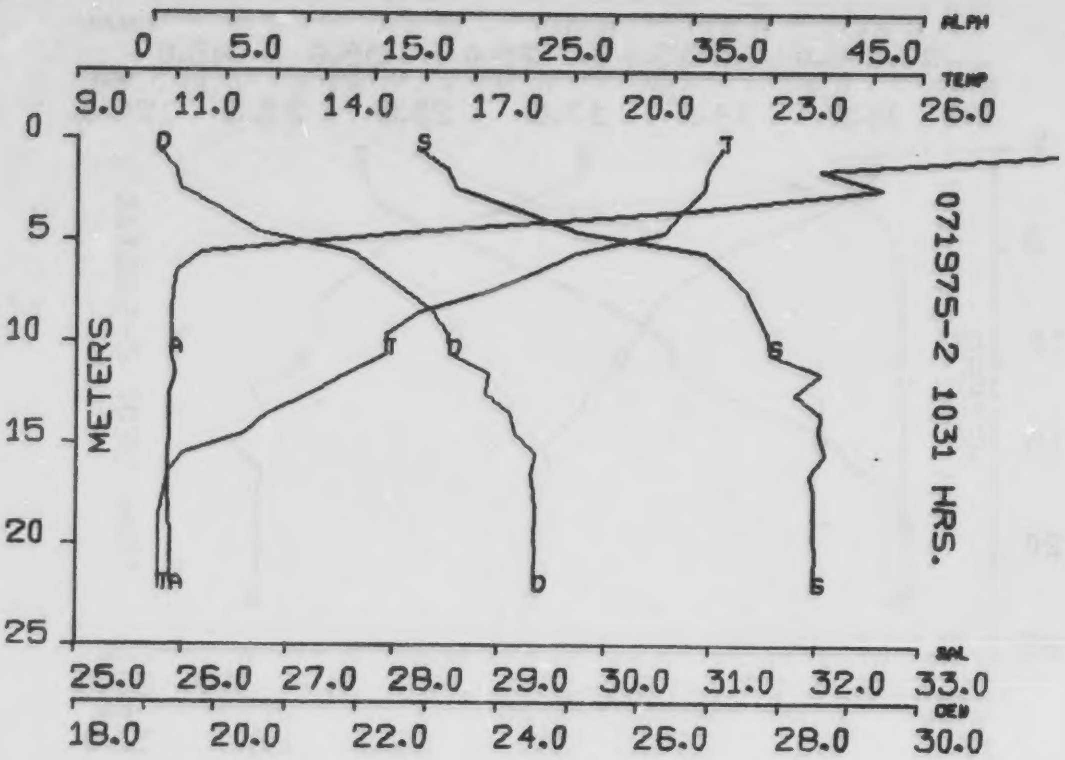
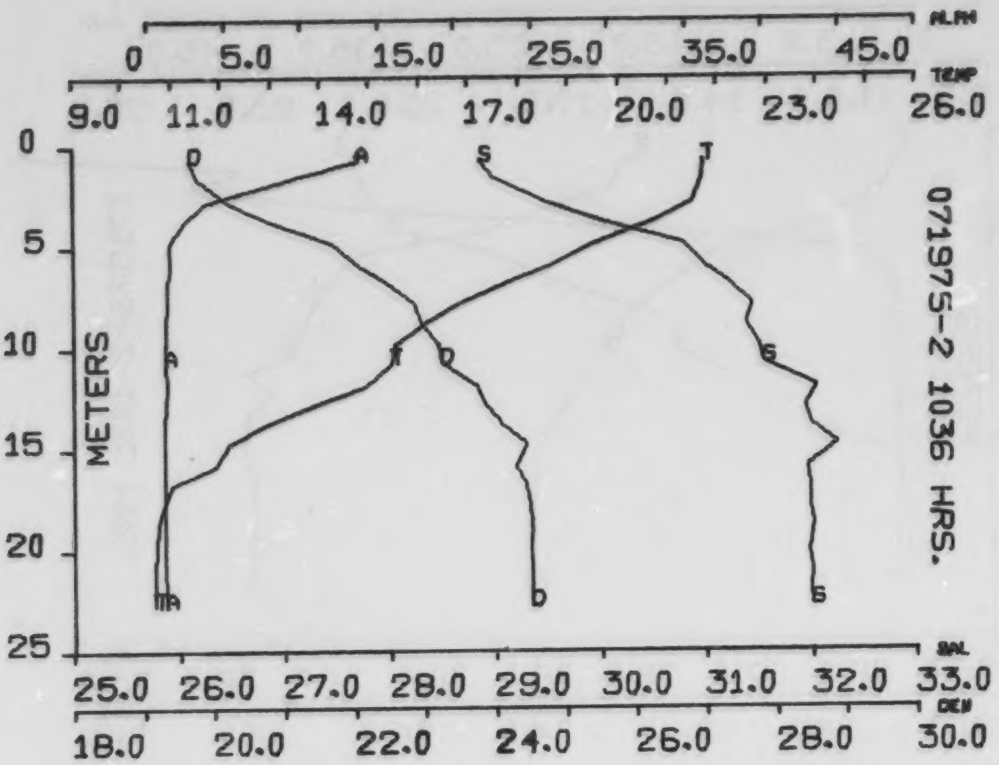
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	28.20	22.24	19.03	82	1.93
1.0	29.08	21.94	19.77	85	1.67
2.0	29.71	21.67	20.32	85	1.60
3.0	30.14	21.46	20.71	86	1.53
4.0	30.49	21.25	21.03	90	1.08
5.0	30.79	20.08	21.56	90	1.01
6.0	31.13	17.97	22.34	91	.98
7.0	31.31	16.52	22.82	91	.91
8.0	31.57	15.55	23.23	92	.85
9.0	31.61	15.15	23.35	92	.81
10.0	31.65	14.89	23.44	92	.82
11.0	31.62	14.65	23.47	92	.82
12.0	31.71	14.36	23.60	92	.84
13.0	31.78	13.93	23.74	92	.85
14.0	31.88	13.53	23.90	92	.85
15.0	32.05	12.97	24.14	92	.87
16.0	32.06	12.33	24.26	91	.92
17.0	32.03	11.78	24.35	91	.95
18.0	32.01	11.34	24.42	91	.93
19.0	32.02	11.22	24.44	91	.98
20.0	32.02	11.19	24.44	90	1.03
21.0	32.02	11.18	24.45	89	1.12
22.0	32.03	11.17	24.46	88	1.27



STATION 071975-2 1031 HRS.
AT DUMPSITE 16 MINUTES AFTER DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	28.12	22.06	19.02	-0	71.14
1.0	28.38	21.81	19.28	1	53.06
2.0	28.56	21.65	19.46	1	45.52
3.0	28.94	21.38	19.82	2	40.39
4.0	29.46	21.01	20.31	11	26.21
5.0	30.23	20.11	21.13	41	11.20
6.0	31.04	18.67	22.11	79	2.33
7.0	31.26	17.70	22.51	87	1.36
8.0	31.40	16.52	22.89	89	1.20
9.0	31.49	15.58	23.17	89	1.14
10.0	31.56	15.23	23.30	89	1.13
11.0	31.78	14.87	23.54	88	1.29
12.0	31.93	14.08	23.83	88	1.30
13.0	31.92	13.27	23.98	90	1.06
14.0	32.05	12.60	24.21	90	1.05
15.0	32.08	11.74	24.39	90	1.01
16.0	32.03	10.99	24.49	91	.98
17.0	31.98	10.81	24.48	91	.98
18.0	32.00	10.72	24.51	90	1.04
19.0	31.99	10.67	24.52	90	1.11
20.0	31.99	10.67	24.52	89	1.14
21.0	32.00	10.67	24.52	89	1.13
22.0	31.99	10.66	24.52	89	1.18



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**********************************************************
*                                                        *
*    STATION  071975-2   1036  HRS.                      *
*    AT SHALLOW DROGUES 21 MINUTES AFTER DISCHARGE       *
*                                                        *
**********************************************************

DEPTH    SALINITY    TEMPERATURE    SIGMA-T    TRANSMIT.    ALPHA
 (M)      (PPT)          (C)                      (%)        (M-1)
   0      28.76         21.72        19.59        13         17.42
 1.0      28.91         21.70        19.71        29         12.48
 2.0      29.16         21.62        19.92        49          7.58
 3.0      29.61         21.32        20.35        72          3.35
 4.0      30.21         20.41        21.04        82          2.02
 5.0      30.82         19.38        21.76        88          1.29
 6.0      31.02         18.53        22.13        87          1.37
 7.0      31.28         17.52        22.56        89          1.19
 8.0      31.43         16.63        22.89        90          1.10
 9.0      31.40         15.99        23.01        90          1.06
10.0      31.52         15.49        23.21        90          1.07
11.0      31.65         15.34        23.34        90          1.09
12.0      32.05         14.83        23.76        89          1.14
13.0      31.95         13.63        23.93        90          1.04
14.0      32.05         12.68        24.20        91           .97
15.0      32.19         12.07        24.42        91           .98
16.0      31.96         11.70        24.31        91           .94
17.0      31.99         10.92        24.47        91           .91
18.0      32.00         10.78        24.50        91           .91
19.0      32.01         10.70        24.52        91           .92
20.0      31.98         10.67        24.51        91           .93
21.0      32.00         10.63        24.53        91           .97
22.0      32.00         10.64        24.53        90          1.03
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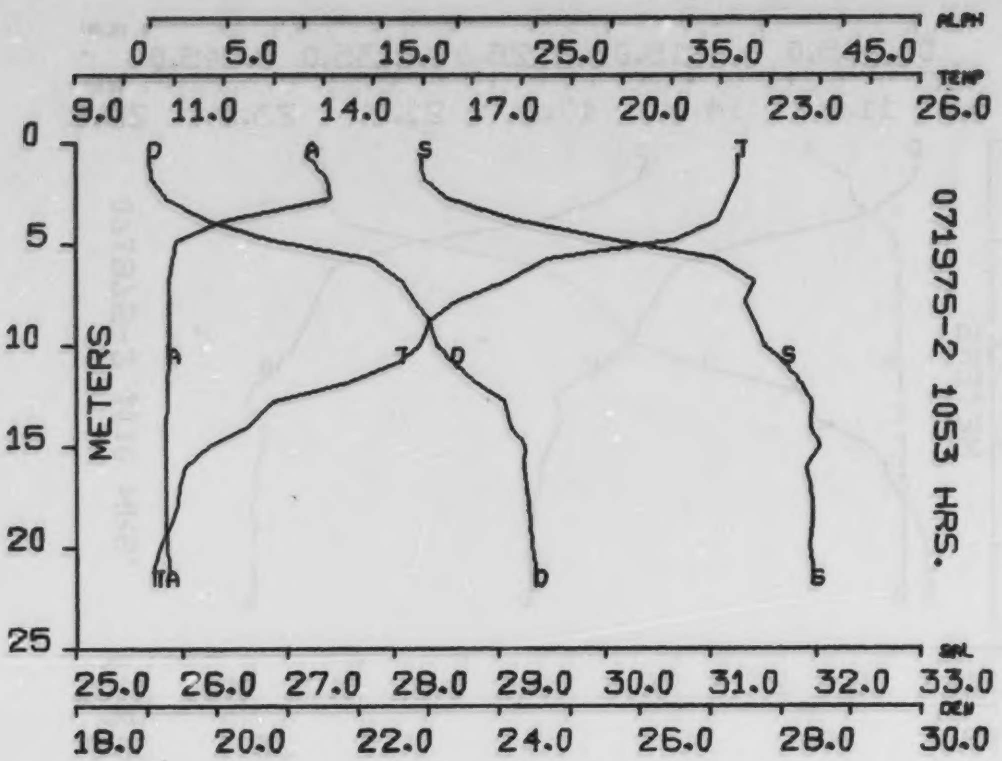

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****************************************************************
*                                                              *
*    STATION  071975-2   1053  HRS.                            *
*    AT SHALLOW DROGUES 38 MINUTES AFTER DISCHARGE             *
*                                                              *
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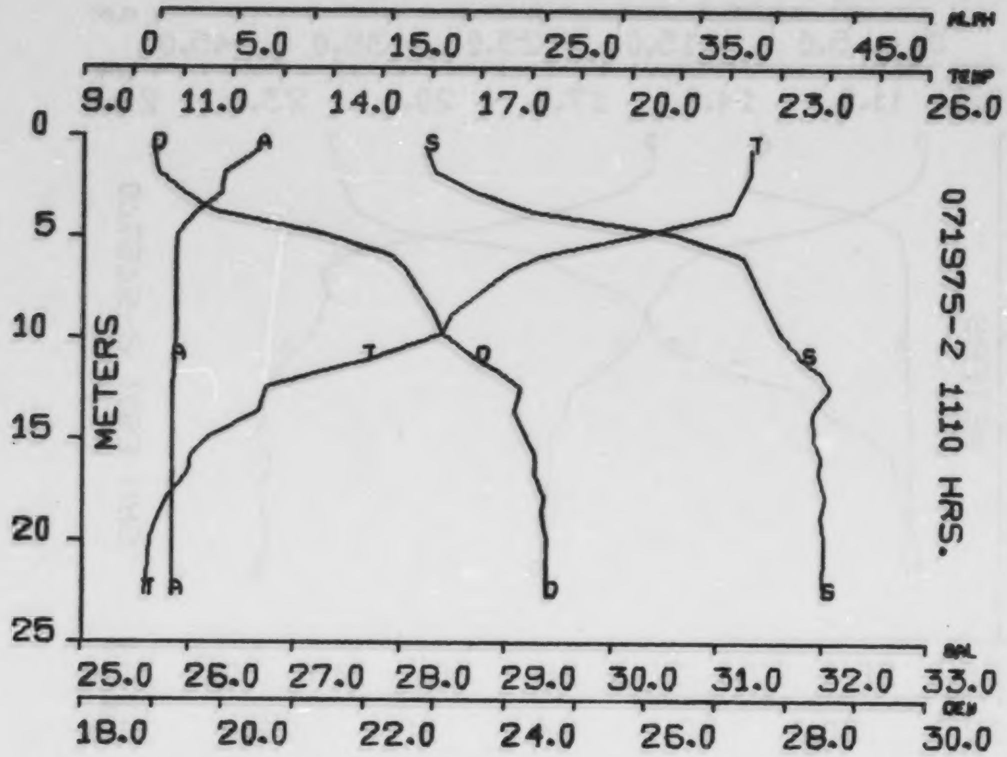
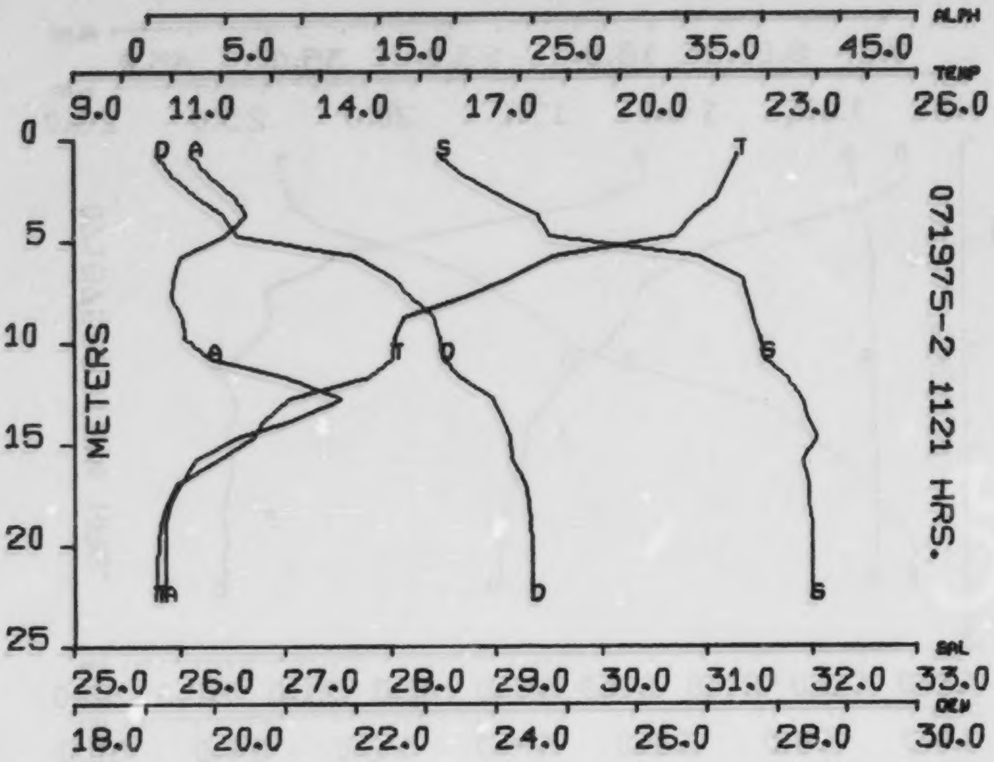
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	28.25	22.34	19.04	39	9.37
1.0	28.28	22.33	19.06	35	10.50
2.0	28.35	22.28	19.13	32	11.43
3.0	28.69	22.07	19.44	39	9.87
4.0	29.35	21.75	20.03	67	4.07
5.0	30.31	20.51	21.08	87	1.41
6.0	31.17	18.27	22.30	89	1.20
7.0	31.41	17.47	22.67	90	1.06
8.0	31.35	16.51	22.85	90	1.07
9.0	31.45	16.07	23.03	90	1.08
10.0	31.54	15.88	23.14	90	1.07
11.0	31.73	15.28	23.41	90	1.07
12.0	31.87	14.20	23.75	91	.97
13.0	31.97	12.83	24.11	91	.92
14.0	31.96	12.43	24.17	92	.88
15.0	32.05	11.62	24.39	92	.85
16.0	31.92	11.19	24.37	92	.84
17.0	31.96	11.08	24.42	92	.86
18.0	31.98	11.02	24.44	92	.85
19.0	31.97	10.89	24.46	92	.85
20.0	31.95	10.68	24.48	91	.91
21.0	31.98	10.55	24.53	91	1.00



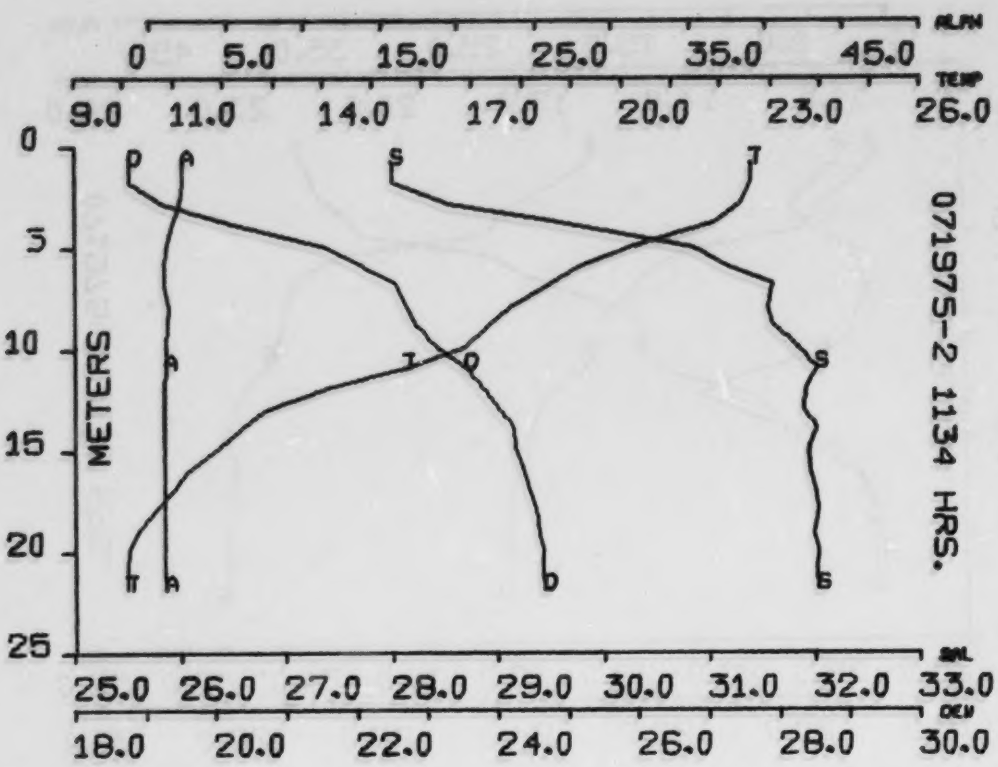
STATION 071975-2 1110 HRS.
AT SHALLOW DROGUES 55 MINUTES AFTER DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	28.18	22.42	18.97	45	7.76
1.0	28.27	22.44	19.03	56	5.79
2.0	28.41	22.41	19.14	66	4.12
3.0	28.86	22.19	19.54	69	3.66
4.0	29.58	21.59	20.24	81	2.11
5.0	30.71	19.86	21.55	89	1.12
6.0	31.26	18.07	22.42	90	1.01
7.0	31.36	17.34	22.67	90	1.05
8.0	31.44	16.82	22.85	90	1.08
9.0	31.54	16.36	23.03	90	1.07
10.0	31.65	15.92	23.22	90	1.03
11.0	31.82	14.80	23.59	91	.99
12.0	32.03	13.27	24.06	91	.91
13.0	32.00	12.60	24.17	92	.84
14.0	31.92	12.23	24.18	92	.79
15.0	31.94	11.48	24.33	92	.79
16.0	31.98	11.16	24.42	92	.81
17.0	31.99	11.00	24.46	92	.79
18.0	32.03	10.69	24.54	92	.79
19.0	32.00	10.50	24.55	92	.81
20.0	32.03	10.35	24.60	92	.86
21.0	32.02	10.32	24.59	92	.86
22.0	32.01	10.28	24.60	92	.86



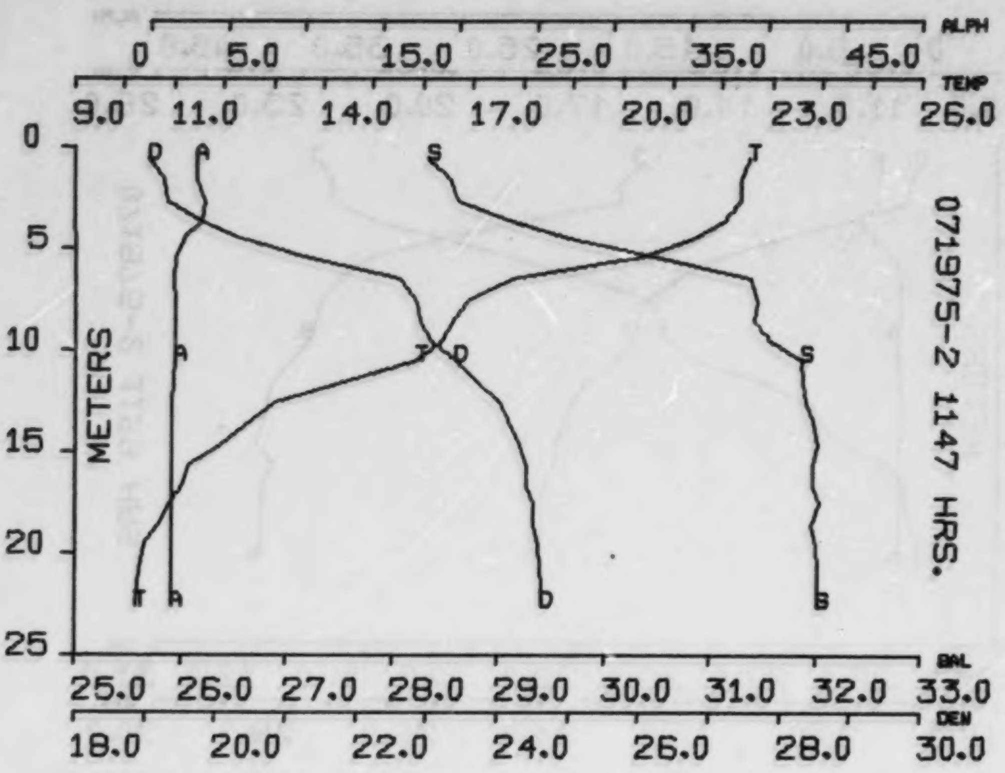
STATION 071975-2 1121 HRS.
AT DEEP DROGUES 66 MINUTES AFTER DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	28.33	22.49	19.06	82	1.89
1.0	28.54	22.32	19.26	74	2.99
2.0	28.78	22.14	19.50	66	4.22
3.0	29.13	21.88	19.83	57	5.69
4.0	29.45	21.38	20.20	56	5.84
5.0	29.90	20.44	20.79	67	4.01
6.0	31.00	18.44	22.13	83	1.86
7.0	31.36	17.62	22.60	86	1.48
8.0	31.41	16.55	22.89	86	1.56
9.0	31.47	15.59	23.15	80	2.17
10.0	31.52	15.45	23.22	77	2.65
11.0	31.59	15.30	23.31	61	5.08
12.0	31.80	14.46	23.64	38	9.89
13.0	31.93	13.19	24.00	31	11.73
14.0	31.99	12.76	24.13	45	8.21
15.0	32.01	12.36	24.22	63	4.74
16.0	31.93	11.72	24.28	76	2.74
17.0	31.98	11.06	24.44	83	1.88
18.0	31.98	10.85	24.48	89	1.19
19.0	32.00	10.74	24.51	91	.94
20.0	32.01	10.70	24.53	91	.92
21.0	32.01	10.67	24.53	91	.90
22.0	32.01	10.65	24.53	91	.91



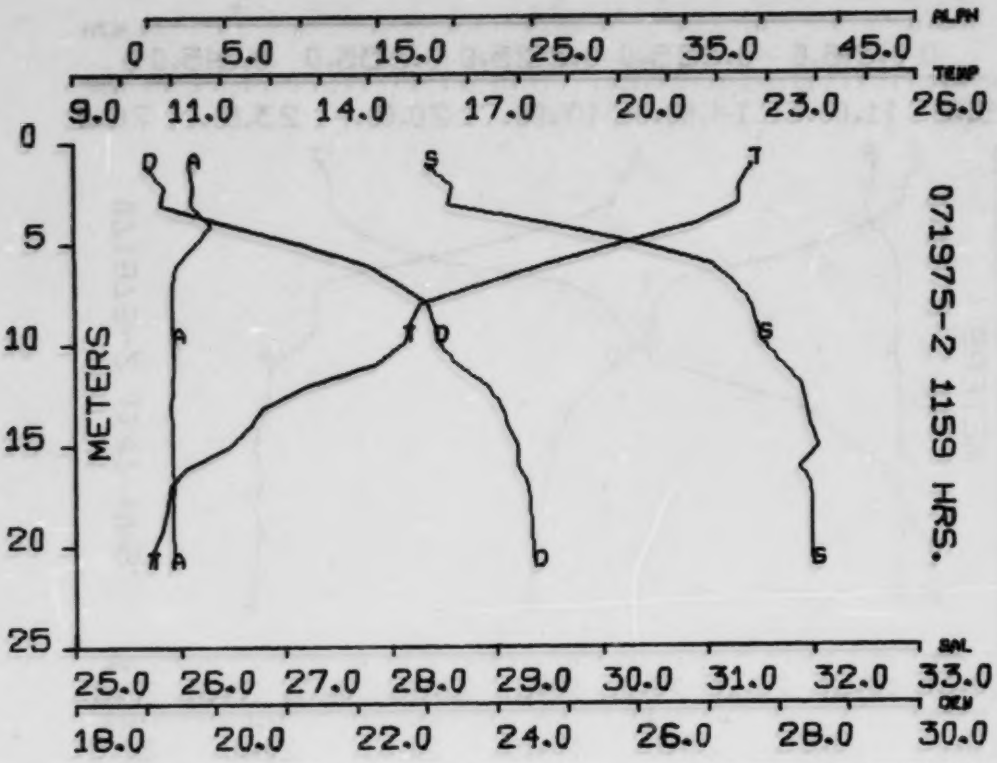
STATION 071975-2 1134 HRS.
AT SHALLOW DROGUES 79 MINUTES AFTER DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	28.00	22.62	18.78	82	1.99
1.0	28.01	22.60	18.79	82	2.04
2.0	28.13	22.53	18.90	82	2.01
3.0	28.70	22.28	19.39	84	1.73
4.0	29.83	21.53	20.45	88	1.31
5.0	30.87	20.12	21.62	91	.95
6.0	31.22	19.05	22.15	92	.83
7.0	31.59	18.36	22.60	91	.93
8.0	31.56	17.70	22.74	89	1.19
9.0	31.66	17.23	22.93	90	1.00
10.0	31.87	16.68	23.21	91	.97
11.0	32.02	15.48	23.59	91	.90
12.0	31.91	14.00	23.82	92	.87
13.0	31.90	12.78	24.06	92	.84
14.0	32.01	12.27	24.24	92	.82
15.0	31.95	11.79	24.28	92	.82
16.0	31.97	11.25	24.40	92	.82
17.0	32.01	10.96	24.48	92	.80
18.0	32.03	10.57	24.56	92	.79
19.0	31.99	10.24	24.59	92	.79
20.0	32.03	10.07	24.65	92	.85
21.0	32.03	10.05	24.65	92	.85



STATION 071975-2 1147 HRS.
BETWEEN DROGUES 92 MINUTES AFTER DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	28.33	22.50	19.05	77	2.61
1.0	28.44	22.45	19.15	75	2.92
2.0	28.55	22.39	19.25	72	3.23
3.0	28.80	22.21	19.49	72	3.27
4.0	29.36	21.76	20.04	76	2.70
5.0	30.12	20.78	20.87	83	1.87
6.0	30.94	18.99	21.94	86	1.45
7.0	31.40	17.43	22.68	87	1.42
8.0	31.43	16.80	22.85	86	1.46
9.0	31.52	16.49	22.99	86	1.46
10.0	31.71	16.11	23.22	86	1.45
11.0	31.87	15.21	23.54	87	1.41
12.0	31.89	13.81	23.85	88	1.31
13.0	31.94	12.79	24.09	88	1.26
14.0	32.00	12.26	24.23	88	1.25
15.0	32.00	11.69	24.34	88	1.23
16.0	31.98	11.21	24.41	88	1.24
17.0	32.00	11.03	24.46	88	1.24
18.0	31.98	10.79	24.48	88	1.23
19.0	31.99	10.53	24.54	88	1.24
20.0	32.02	10.36	24.59	88	1.25
21.0	32.02	10.29	24.60	88	1.25
22.0	32.02	10.24	24.61	88	1.28



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***************************************************************
*                                                             *
*    STATION  071975-2   1159  HRS.                           *
*    AT DEEP DROGUES 104 MINUTES AFTER DISCHARGE              *
*                                                             *
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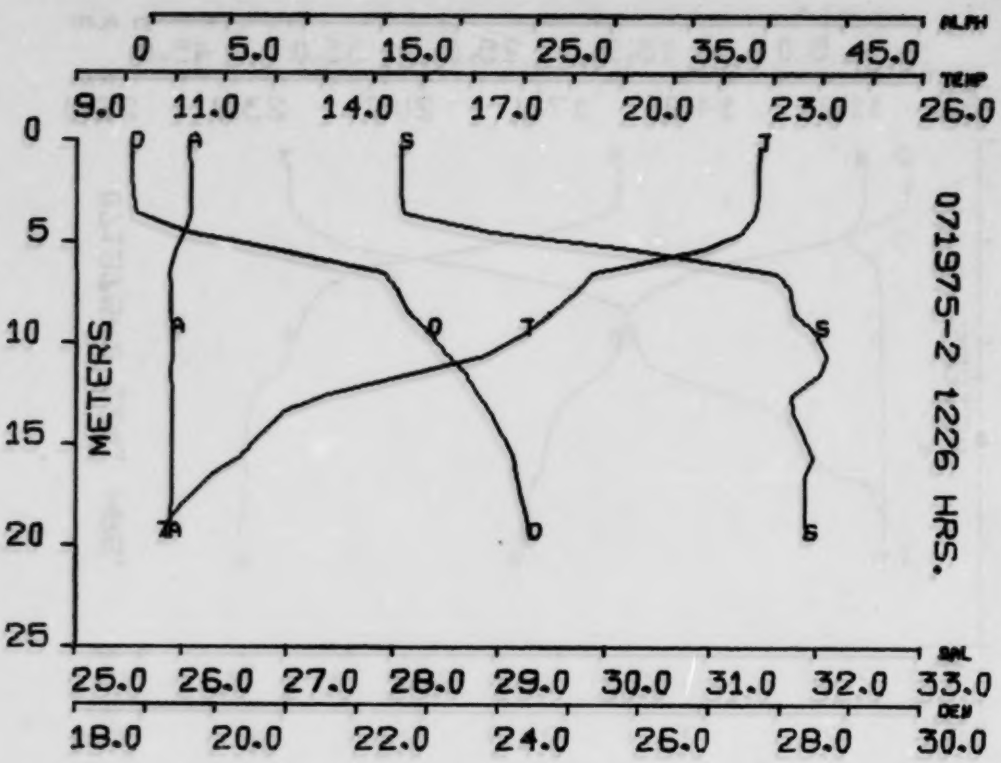
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	28.08	22.98	18.73	80	2.24
1.0	28.32	22.71	18.99	78	2.50
2.0	28.56	22.45	19.25	76	2.76
3.0	28.55	22.40	19.25	76	2.75
4.0	29.43	21.59	20.14	68	3.91
5.0	30.31	20.07	21.20	75	2.90
6.0	30.98	18.62	22.07	84	1.73
7.0	31.25	17.25	22.61	87	1.41
8.0	31.41	15.91	23.04	87	1.43
9.0	31.48	15.74	23.12	87	1.43
10.0	31.55	15.56	23.21	87	1.45
11.0	31.70	15.08	23.44	86	1.46
12.0	31.88	13.74	23.85	87	1.35
13.0	31.93	12.92	24.06	88	1.31
14.0	31.97	12.55	24.16	88	1.33
15.0	32.05	12.15	24.30	87	1.38
16.0	31.88	11.29	24.32	87	1.39
17.0	31.98	10.92	24.46	86	1.47
18.0	31.99	10.88	24.48	87	1.42
19.0	31.99	10.78	24.49	87	1.42
20.0	31.99	10.60	24.53	87	1.43
21.0	32.01	10.50	24.56	87	1.41



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*                                                               *
*    STATION  071975-2   1226  HRS.                             *
*    AT SHALLOW DROGUES 131 MINUTES AFTER DISCHARGE             *
*                                                               *
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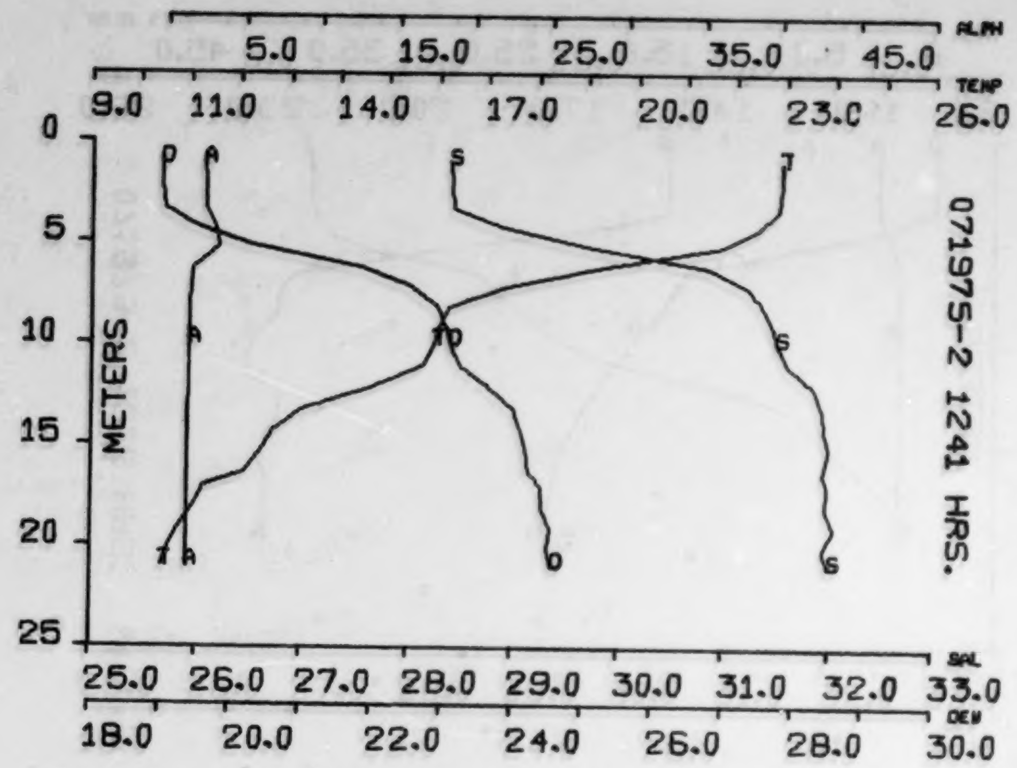
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	28.06	22.73	18.79	79	2.41
1.0	28.07	22.72	18.80	78	2.45
2.0	28.07	22.71	18.80	78	2.49
3.0	28.09	22.68	18.82	78	2.50
4.0	28.48	22.51	19.17	80	2.28
5.0	29.69	21.90	20.25	84	1.71
6.0	31.02	20.34	21.67	88	1.26
7.0	31.71	19.20	22.49	89	1.12
8.0	31.78	18.74	22.65	89	1.18
9.0	31.90	18.23	22.87	88	1.24
10.0	32.05	17.63	23.13	88	1.25
11.0	32.07	16.57	23.39	88	1.22
12.0	31.89	14.88	23.62	88	1.24
13.0	31.77	13.50	23.82	88	1.29
14.0	31.84	12.91	23.99	88	1.29
15.0	31.93	12.53	24.13	88	1.27
16.0	31.94	12.05	24.23	88	1.26
17.0	31.90	11.52	24.30	88	1.24
18.0	31.90	11.13	24.37	89	1.20
19.0	31.91	10.84	24.42	89	1.19



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*                                                              *
*    STATION  071975-2   1241  HRS.                            *
*    AT DEEP DROGUES 146 MINUTES AFTER DISCHARGE               *
*                                                              *
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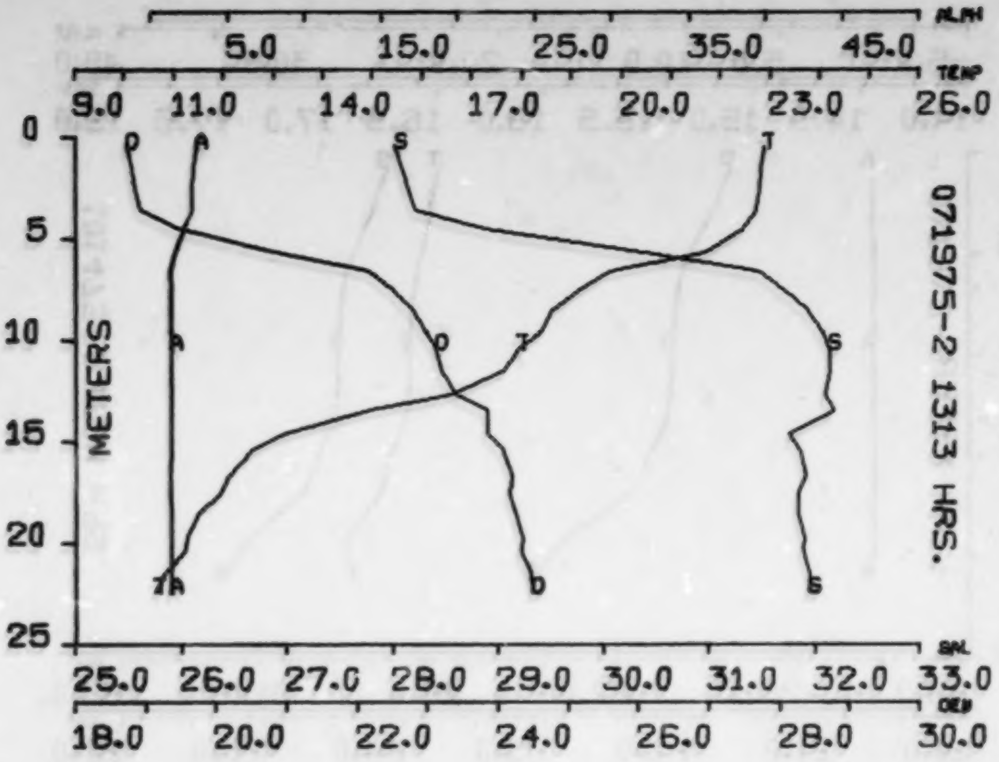
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	28.40	22.92	18.99	79	2.34
1.0	28.41	22.91	19.01	79	2.41
2.0	28.43	22.91	19.02	78	2.47
3.0	28.44	22.86	19.04	78	2.47
4.0	28.78	22.54	19.39	74	2.99
5.0	29.56	21.84	20.16	72	3.33
6.0	30.63	19.71	21.53	82	1.98
7.0	31.16	17.67	22.43	86	1.48
8.0	31.35	16.40	22.88	87	1.41
9.0	31.45	16.02	23.04	87	1.40
10.0	31.51	15.92	23.11	87	1.40
11.0	31.62	15.69	23.24	87	1.43
12.0	31.83	14.76	23.60	87	1.37
13.0	31.93	13.49	23.94	88	1.30
14.0	31.96	12.80	24.10	88	1.28
15.0	32.01	12.49	24.20	88	1.27
16.0	31.97	12.18	24.22	88	1.24
17.0	31.99	11.28	24.40	88	1.23
18.0	31.98	11.08	24.43	88	1.24
19.0	32.05	10.79	24.54	88	1.27
20.0	31.95	10.59	24.50	88	1.27



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*****************************************************************
*                                                               *
*    STATION  071975-2    1313  HRS.                            *
*    AT SHALLOW DROGUES 178 MINUTES AFTER DISCHARGE             *
*                                                               *
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DEPTH     SALINITY    TEMPERATURE     SIGMA-T     TRANSMIT.    ALPHA
 (M)       (PPT)          (C)                        (%)       (M-1)
  0        28.01         22.93         18.70          74        3.00
 1.0       28.08         22.84         18.77          76        2.76
 2.0       28.13         22.79         18.83          77        2.62
 3.0       28.19         22.75         18.89          77        2.57
 4.0       28.54         22.57         19.20          79        2.30
 5.0       29.52         22.11         20.06          83        1.81
 6.0       30.77         20.98         21.31          87        1.39
 7.0       31.59         19.46         22.33          88        1.23
 8.0       31.83         18.86         22.66          88        1.27
 9.0       32.01         18.47         22.90          88        1.29
10.0       32.12         18.12         23.06          88        1.28
11.0       32.15         17.75         23.17          88        1.24
12.0       32.13         17.13         23.30          88        1.22
13.0       32.14         15.82         23.61          88        1.23
14.0       31.98         14.08         23.86          88        1.23
15.0       31.81         12.86         23.98          88        1.22
16.0       31.90         12.34         24.14          89        1.22
17.0       31.90         12.03         24.20          89        1.21
18.0       31.84         11.71         24.22          88        1.22
19.0       31.87         11.38         24.30          88        1.26
20.0       31.90         11.23         24.34          88        1.26
21.0       31.94         10.96         24.42          88        1.26
22.0       31.96         10.68         24.49          88        1.27
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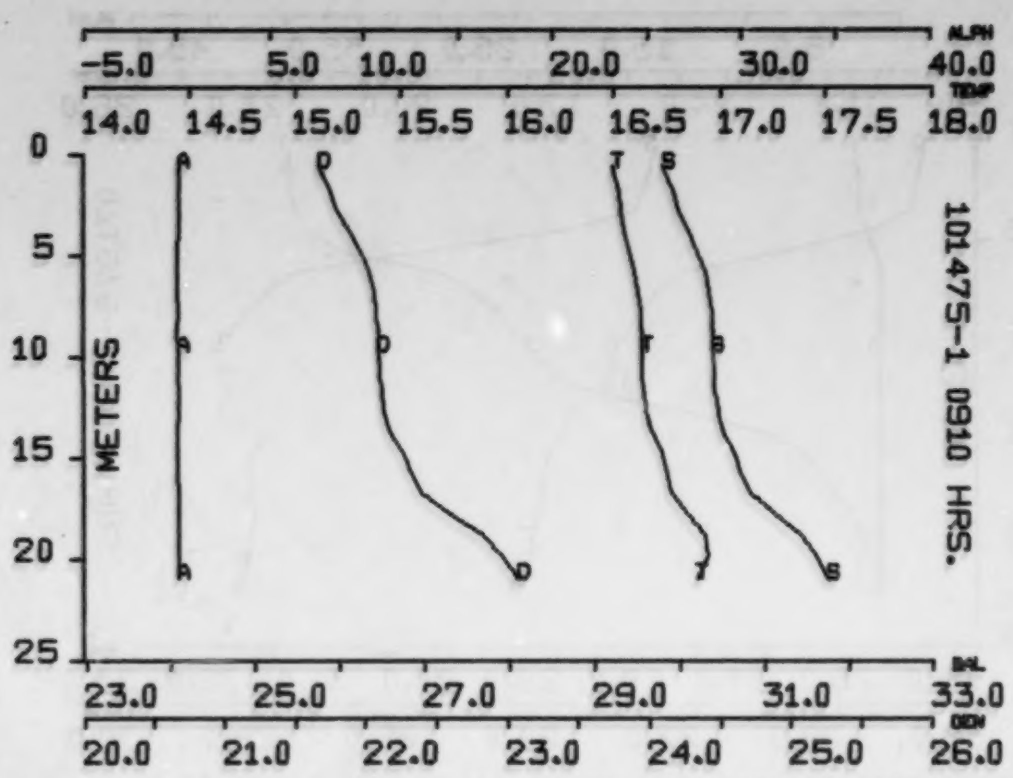
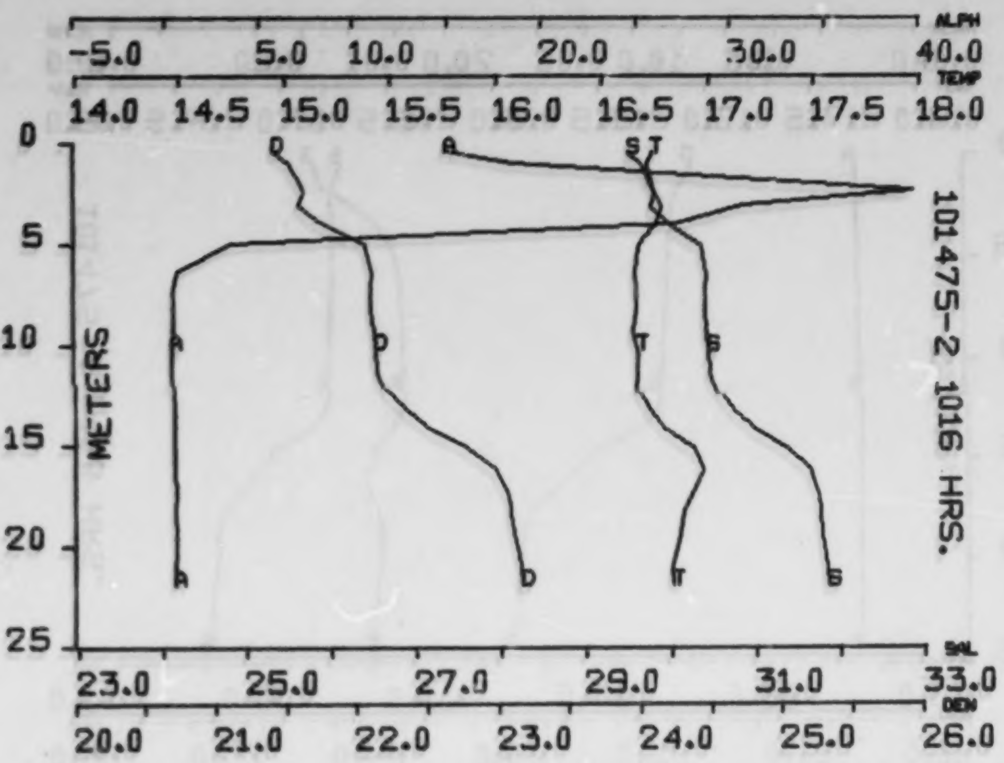


STATION 101475-1 0910 HRS.
AT DUMPSITE BEFORE SLUDGE DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	29.78	16.48	21.66	100	.05
1.0	29.88	16.51	21.73	100	.05
2.0	29.96	16.53	21.79	99	.07
3.0	30.05	16.54	21.85	99	.09
4.0	30.16	16.56	21.94	100	.03
5.0	30.26	16.58	22.01	100	.03
6.0	30.34	16.60	22.06	100	.03
7.0	30.39	16.61	22.10	100	.04
8.0	30.41	16.63	22.11	100	.04
9.0	30.42	16.63	22.11	100	.03
10.0	30.42	16.63	22.12	100	.04
11.0	30.43	16.63	22.12	100	.04
12.0	30.45	16.64	22.14	100	.04
13.0	30.49	16.65	22.16	100	.04
14.0	30.58	16.69	22.22	100	.03
15.0	30.71	16.73	22.31	100	.02
16.0	30.78	16.75	22.37	100	.03
17.0	30.95	16.79	22.48	99	.05
18.0	31.24	16.87	22.69	99	.06
19.0	31.52	16.93	22.89	99	.08
20.0	31.68	16.93	23.01	99	.08



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*****************************************************************
*                                                               *
*    STATION  101475-2   1016  HRS.                             *
*    AT DUMPSITE 10 MINUTES AFTER SLUDGE DISCHARGE              *
*                                                               *
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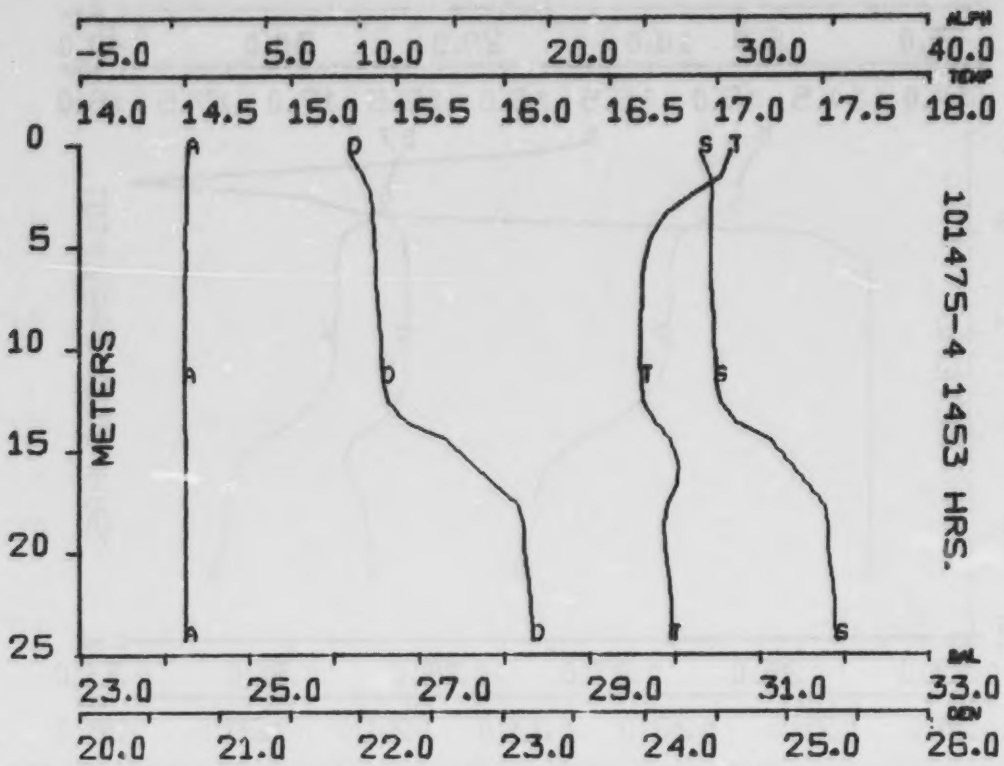
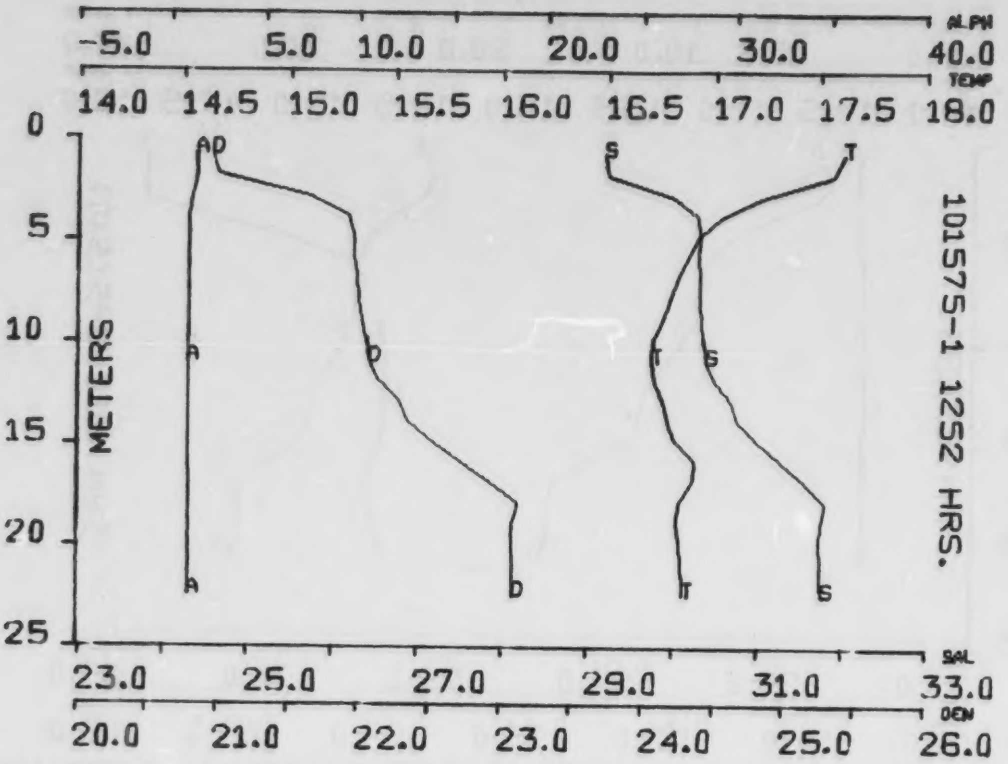
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	29.46	16.74	21.36	27	12.48
1.0	29.72	16.70	21.56	15	19.40
2.0	29.83	16.73	21.64	5	35.42
3.0	29.82	16.77	21.63	4	31.36
4.0	30.05	16.74	21.81	8	26.62
5.0	30.41	16.66	22.10	71	3.37
6.0	30.46	16.65	22.14	89	1.27
7.0	30.46	16.65	22.14	96	.42
8.0	30.46	16.65	22.14	96	.37
9.0	30.47	16.64	22.16	97	.32
10.0	30.50	16.66	22.17	97	.30
11.0	30.51	16.66	22.18	97	.30
12.0	30.57	16.65	22.23	97	.30
13.0	30.74	16.69	22.34	97	.32
14.0	30.97	16.76	22.51	97	.34
15.0	31.36	16.90	22.77	97	.35
16.0	31.64	16.95	22.98	96	.36
17.0	31.75	16.92	23.07	96	.40
18.0	31.79	16.87	23.11	96	.39
19.0	31.81	16.85	23.13	96	.40
20.0	31.84	16.82	23.15	96	.41
21.0	31.87	16.80	23.18	96	.39



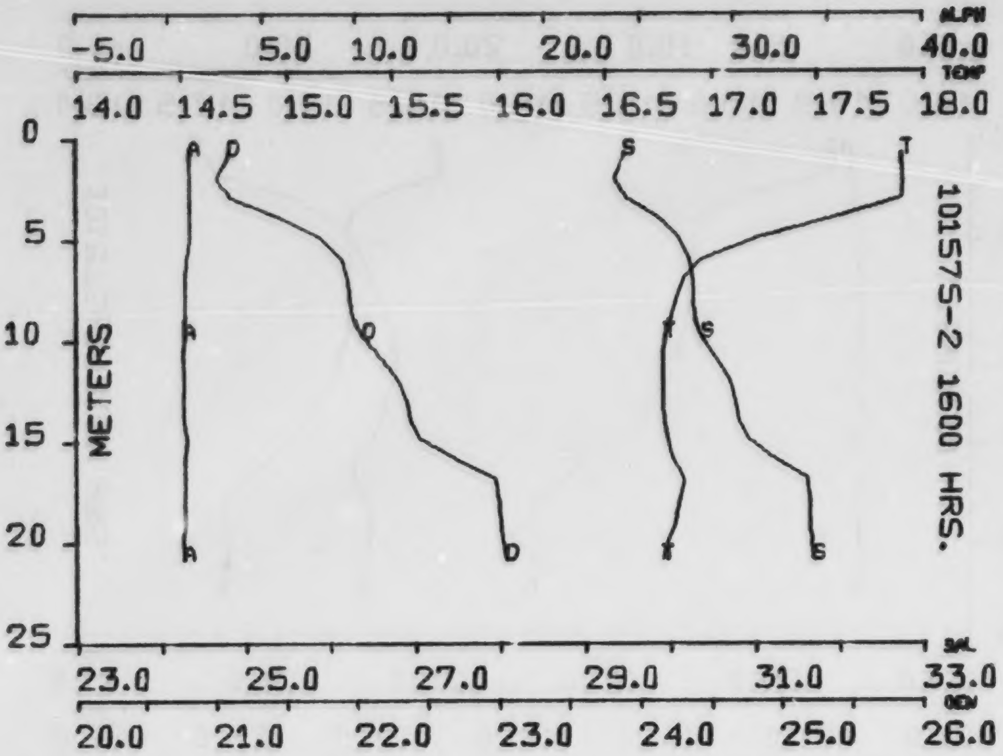
STATION 101475-4 1453 HRS.
OUT OF DUMP AREA

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	30.27	17.07	21.90	93	.78
1.0	30.38	17.03	21.99	93	.72
2.0	30.45	16.93	22.07	93	.68
3.0	30.44	16.79	22.09	94	.67
4.0	30.43	16.71	22.11	94	.66
5.0	30.43	16.67	22.12	94	.67
6.0	30.43	16.65	22.12	94	.67
7.0	30.44	16.64	22.13	94	.66
8.0	30.46	16.64	22.14	94	.64
9.0	30.47	16.64	22.15	94	.65
10.0	30.48	16.64	22.16	94	.65
11.0	30.49	16.64	22.17	94	.65
12.0	30.52	16.65	22.19	94	.65
13.0	30.64	16.68	22.27	94	.65
14.0	30.93	16.75	22.48	94	.67
15.0	31.26	16.80	22.72	93	.68
16.0	31.46	16.82	22.87	93	.68
17.0	31.66	16.79	23.03	93	.68
18.0	31.81	16.76	23.15	93	.69
19.0	31.83	16.75	23.17	93	.69
20.0	31.85	16.76	23.18	93	.69
21.0	31.87	16.77	23.19	93	.69
22.0	31.90	16.78	23.21	93	.70
23.0	31.92	16.79	23.22	93	.70
24.0	31.93	16.78	23.23	93	.72



STATION 101575-1 1252 HRS.
AT DUMPSITE BEFORE SLUDGE DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	29.18	17.65	20.93	88	1.28
1.0	29.22	17.59	20.98	88	1.30
2.0	29.47	17.46	21.20	88	1.24
3.0	30.09	17.17	21.74	90	1.01
4.0	30.32	17.00	21.96	91	.90
5.0	30.33	16.90	21.98	91	.91
6.0	30.32	16.85	21.99	91	.91
7.0	30.33	16.81	22.01	91	.90
8.0	30.34	16.78	22.02	91	.90
9.0	30.36	16.74	22.05	92	.88
10.0	30.39	16.71	22.07	92	.88
11.0	30.42	16.70	22.10	92	.87
12.0	30.55	16.72	22.20	91	.90
13.0	30.73	16.76	22.32	91	.93
14.0	30.85	16.78	22.41	91	.91
15.0	31.09	16.84	22.58	91	.93
16.0	31.37	16.90	22.78	91	.94
17.0	31.63	16.87	22.98	91	.96
18.0	31.81	16.82	23.14	90	1.00
19.0	31.76	16.82	23.10	90	1.00
20.0	31.76	16.84	23.10	90	1.01
21.0	31.78	16.84	23.11	90	1.02
22.0	31.79	16.85	23.11	90	1.02



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****************************************************************
*                                                              *
*    STATION  101575-2   1600  HRS.                            *
*    AT DUMPSITE BEFORE SECOND SLUDGE DISCHARGE                *
*                                                              *
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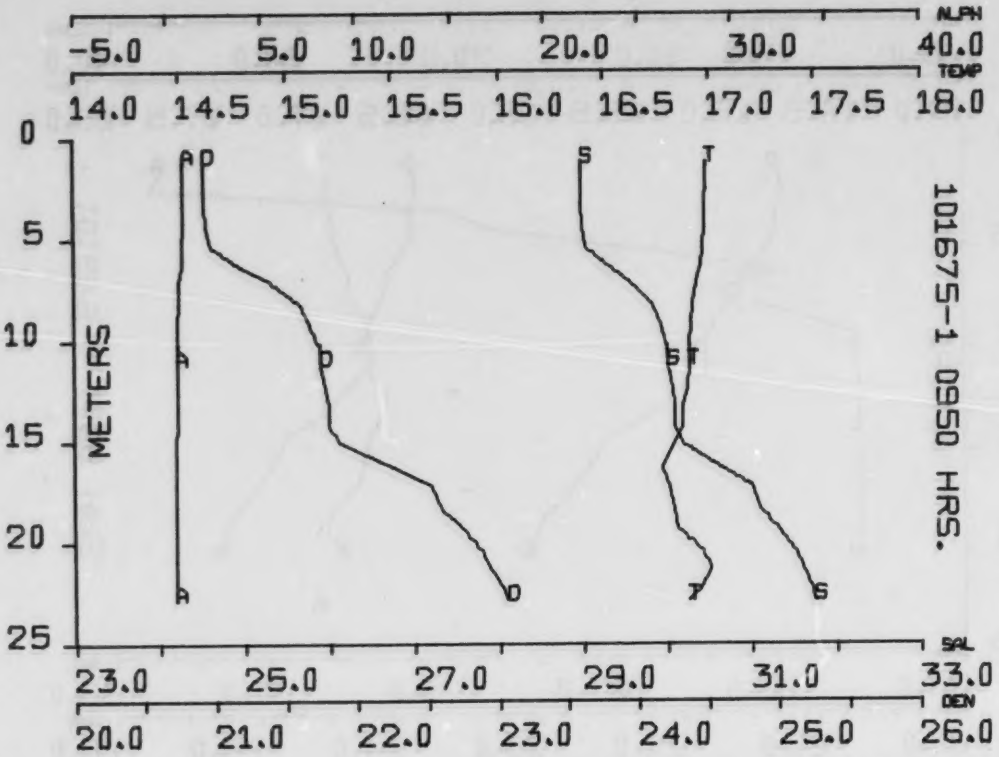
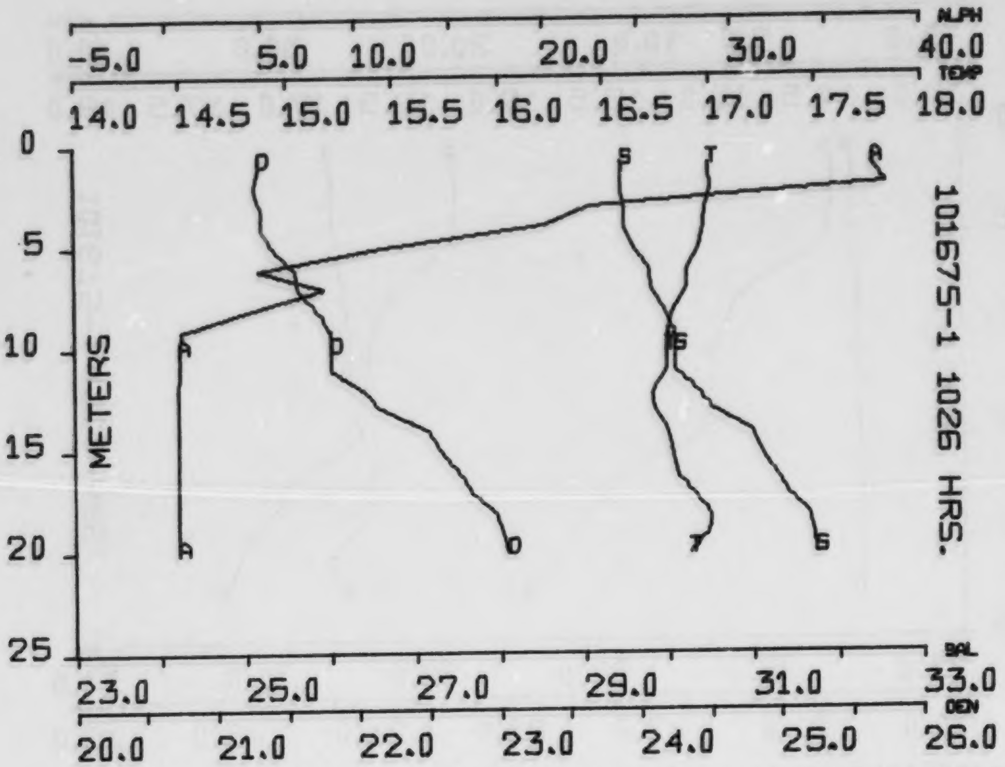
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	29.55	17.89	21.16	90	1.01
1.0	29.45	17.90	21.08	90	1.04
2.0	29.38	17.90	21.03	90	1.07
3.0	29.54	17.86	21.16	90	1.05
4.0	29.91	17.52	21.52	90	1.07
5.0	30.14	17.18	21.78	90	1.07
6.0	30.26	16.94	21.92	91	.90
7.0	30.29	16.85	21.96	92	.84
8.0	30.29	16.83	21.97	93	.78
9.0	30.31	16.79	21.99	93	.76
10.0	30.42	16.77	22.09	93	.78
11.0	30.57	16.76	22.20	93	.75
12.0	30.73	16.77	22.32	93	.76
13.0	30.79	16.76	22.37	93	.75
14.0	30.85	16.77	22.41	92	.82
15.0	30.98	16.79	22.51	91	.94
16.0	31.34	16.82	22.77	92	.82
17.0	31.66	16.87	23.01	93	.77
18.0	31.68	16.84	23.03	93	.77
19.0	31.68	16.82	23.03	93	.77
20.0	31.70	16.78	23.05	93	.76



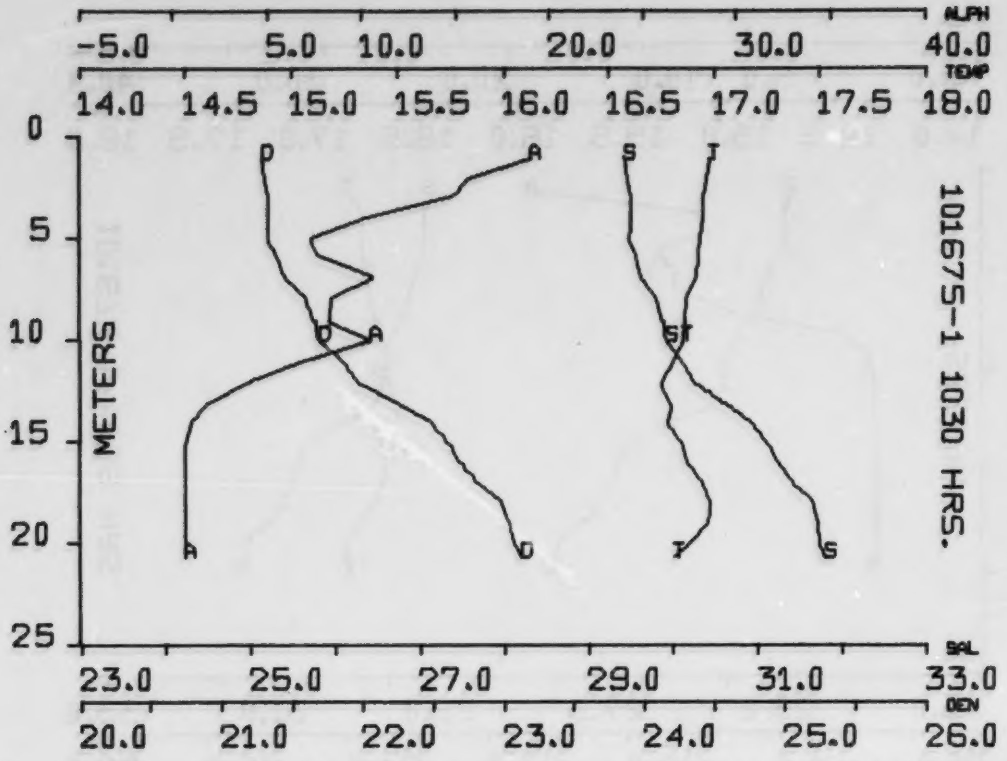
STATION 101675-1 0950 HRS.
AT DUMPSITE BEFOR SLUDGE DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	28.96	16.98	20.92	93	.72
1.0	28.96	16.98	20.92	93	.75
2.0	28.96	16.98	20.92	92	.78
3.0	28.97	16.97	20.93	93	.77
4.0	28.98	16.97	20.94	93	.76
5.0	29.01	16.97	20.97	93	.75
6.0	29.23	16.96	21.13	93	.69
7.0	29.57	16.93	21.39	94	.58
8.0	29.79	16.92	21.57	95	.52
9.0	29.91	16.91	21.66	95	.47
10.0	29.98	16.90	21.72	96	.44
11.0	30.01	16.90	21.74	96	.44
12.0	30.05	16.89	21.77	96	.42
13.0	30.08	16.87	21.80	96	.41
14.0	30.09	16.87	21.81	96	.40
15.0	30.18	16.83	21.89	96	.37
16.0	30.57	16.78	22.19	97	.33
17.0	30.96	16.80	22.49	97	.36
18.0	31.08	16.83	22.58	97	.34
19.0	31.26	16.85	22.70	97	.33
20.0	31.46	16.94	22.84	96	.36
21.0	31.60	17.01	22.93	96	.38
22.0	31.69	16.96	23.01	96	.37



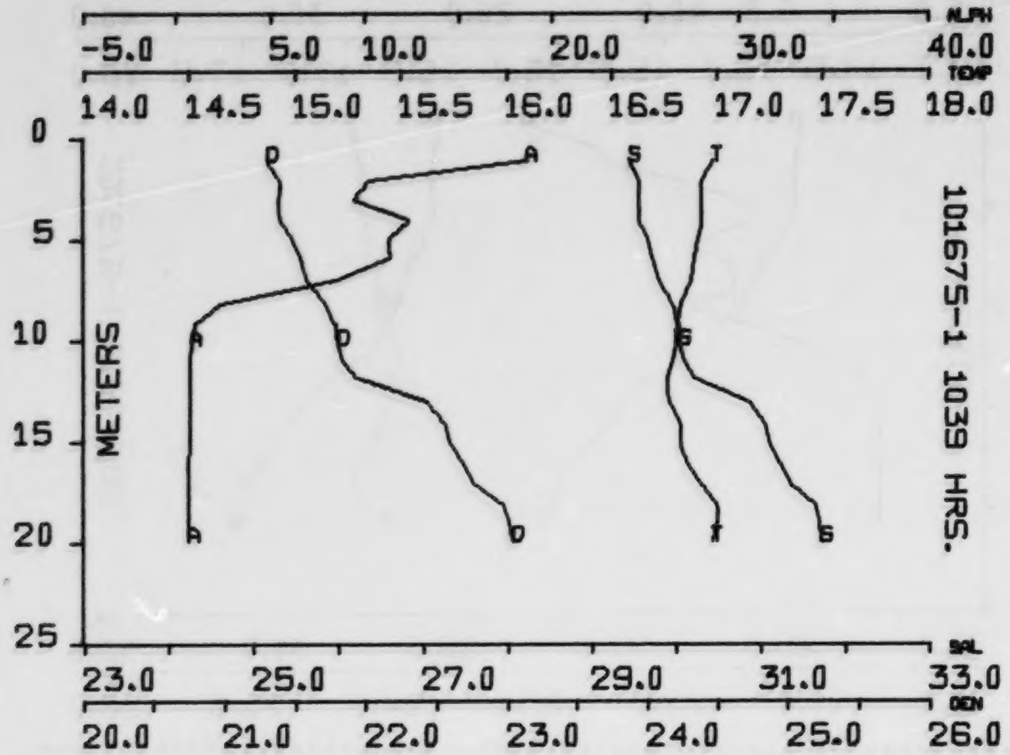
STATION 101675-1 1026 HRS.
AT DUMPSITE 4 MINUTES AFTER DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	29.48	16.97	21.32	3	36.56
1.0	29.45	16.99	21.30	2	37.37
2.0	29.42	17.00	21.27	2	38.08
3.0	29.49	16.97	21.32	10	23.42
4.0	29.47	16.97	21.31	14	19.86
5.0	29.59	16.94	21.41	31	12.00
6.0	29.76	16.89	21.55	60	5.27
7.0	29.80	16.88	21.58	45	7.97
8.0	29.94	16.83	21.70	64	4.69
9.0	30.06	16.80	21.80	91	1.00
10.0	30.08	16.79	21.82	95	.53
11.0	30.08	16.79	21.82	95	.49
12.0	30.34	16.73	22.03	95	.49
13.0	30.52	16.74	22.17	95	.53
14.0	30.95	16.80	22.48	95	.54
15.0	31.09	16.83	22.59	95	.50
16.0	31.25	16.84	22.70	95	.46
17.0	31.40	16.91	22.80	96	.46
18.0	31.63	16.99	22.96	95	.47
19.0	31.72	16.99	23.03	96	.46
20.0	31.75	16.91	23.07	95	.51



STATION 101675-1 1030 HRS.
AT DUMPSITE 8 MINUTES AFTER DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	29.41	16.99	21.26	8	22.76
1.0	29.44	16.97	21.29	15	19.18
2.0	29.46	16.95	21.31	21	15.59
3.0	29.50	16.94	21.34	24	14.36
4.0	29.50	16.94	21.34	37	9.93
5.0	29.47	16.92	21.33	49	7.21
6.0	29.58	16.92	21.41	44	8.25
7.0	29.66	16.90	21.47	35	10.40
8.0	29.82	16.86	21.61	44	8.29
9.0	29.88	16.85	21.66	44	8.15
10.0	29.94	16.84	21.70	36	10.32
11.0	30.13	16.80	21.86	51	6.74
12.0	30.26	16.74	21.96	67	4.07
13.0	30.60	16.78	22.22	82	2.03
14.0	30.94	16.77	22.48	92	.85
15.0	31.13	16.84	22.61	94	.58
16.0	31.26	16.87	22.70	95	.49
17.0	31.45	16.94	22.83	95	.49
18.0	31.67	16.98	22.99	95	.49
19.0	31.74	16.96	23.05	95	.49
20.0	31.75	16.88	23.08	95	.53



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*                                                                 *
*    STATION  101675-1   1039  HRS.                               *
*    AT DUMPSITE 17 MINUTES AFTER DISCHARGE                       *
*                                                                 *
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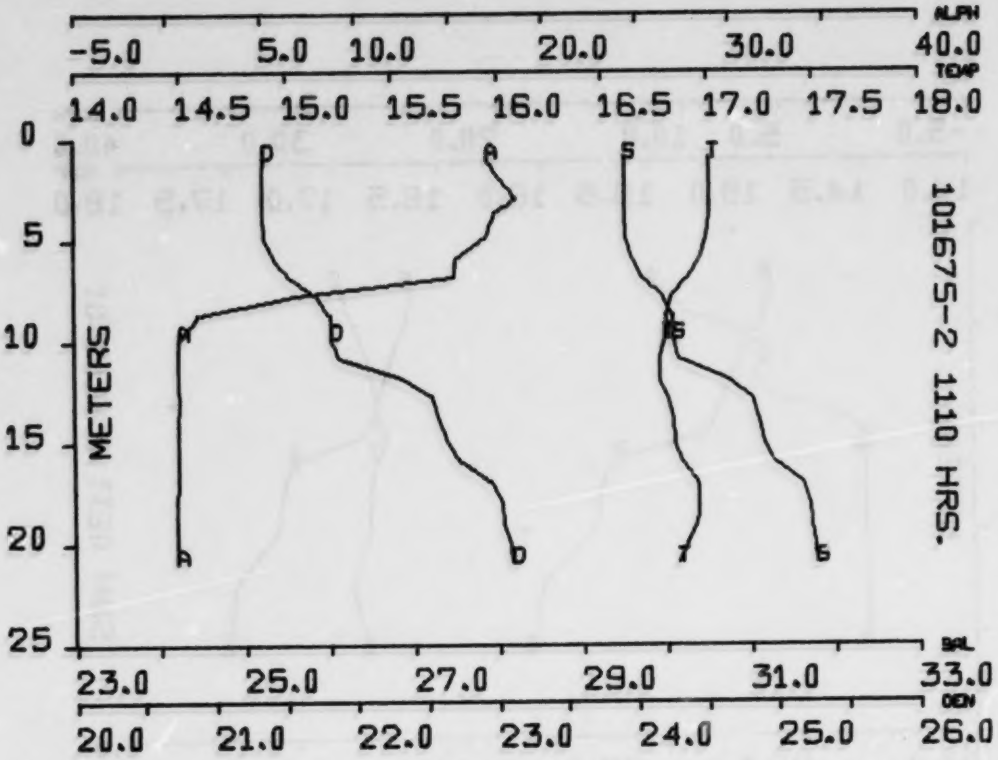
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	29.35	17.02	21.21	-5	26.78
1.0	29.45	16.97	21.30	15	18.64
2.0	29.56	16.92	21.39	36	10.49
3.0	29.54	16.92	21.38	39	9.40
4.0	29.57	16.92	21.40	29	12.32
5.0	29.68	16.89	21.49	33	11.18
6.0	29.75	16.88	21.55	34	10.81
7.0	29.82	16.86	21.60	46	7.96
8.0	29.95	16.83	21.71	77	2.68
9.0	30.03	16.80	21.78	91	1.00
10.0	30.05	16.80	21.80	93	.72
11.0	30.10	16.78	21.84	94	.62
12.0	30.32	16.76	22.01	94	.63
13.0	30.88	16.77	22.44	94	.65
14.0	31.06	16.83	22.56	94	.63
15.0	31.12	16.83	22.61	94	.60
16.0	31.24	16.86	22.69	94	.57
17.0	31.36	16.93	22.76	94	.59
18.0	31.62	16.99	22.95	94	.59
19.0	31.72	17.00	23.02	94	.60



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*****************************************************************
*                                                               *
*   STATION  101675-2   1110  HRS.                              *
*   AT DUMPSITE 48 MINUTES AFTER DISCHARGE                      *
*                                                               *
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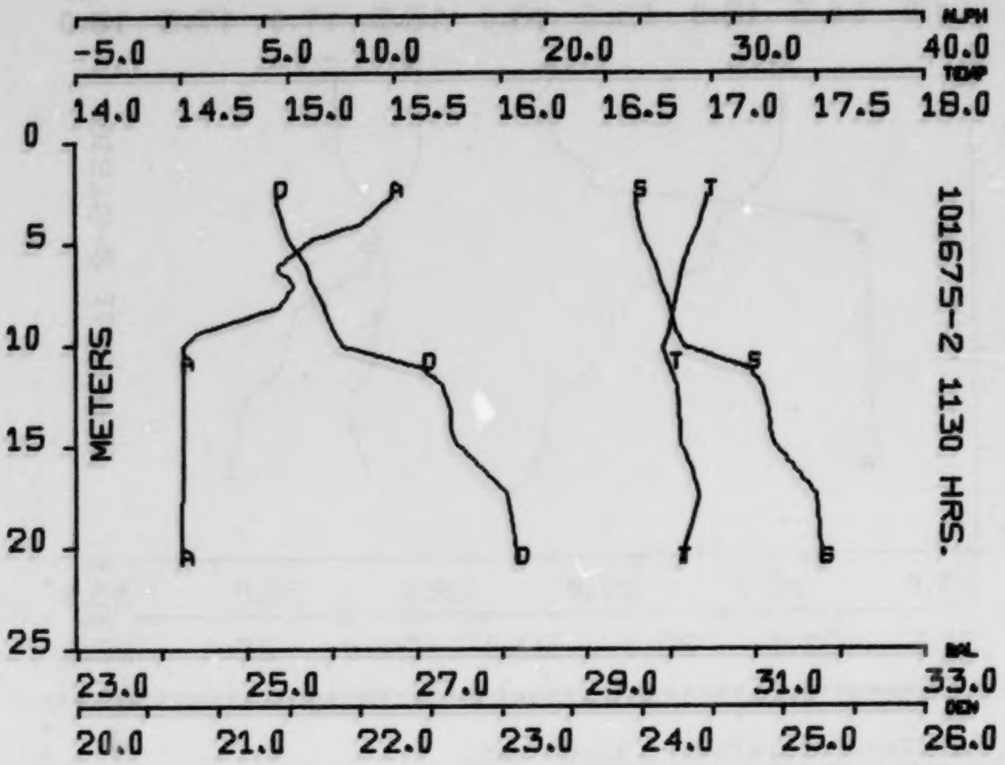
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	29.52	17.00	21.34	20	16.28
1.0	29.51	17.00	21.33	18	16.99
2.0	29.50	17.01	21.33	17	17.73
3.0	29.50	17.00	21.33	16	18.35
4.0	29.51	17.00	21.34	18	17.11
5.0	29.54	16.98	21.37	19	16.57
6.0	29.63	16.95	21.44	22	15.16
7.0	29.80	16.88	21.58	30	12.86
8.0	30.00	16.81	21.75	63	4.97
9.0	30.07	16.80	21.81	88	1.28
10.0	30.09	16.79	21.83	95	.50
11.0	30.25	16.77	21.95	96	.45
12.0	30.79	16.77	22.37	96	.45
13.0	31.05	16.82	22.55	94	.57
14.0	31.11	16.84	22.60	95	.46
15.0	31.17	16.84	22.64	96	.40
16.0	31.33	16.88	22.75	96	.42
17.0	31.63	16.96	22.96	96	.42
18.0	31.71	16.95	23.03	96	.39
19.0	31.73	16.94	23.05	96	.38
20.0	31.77	16.89	23.09	96	.41



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****************************************************************
*                                                              *
*    STATION  101675-2   1130  HRS.                            *
*    AT DUMPSITE 68 MINUTES AFTER DISCHARGE                    *
*                                                              *
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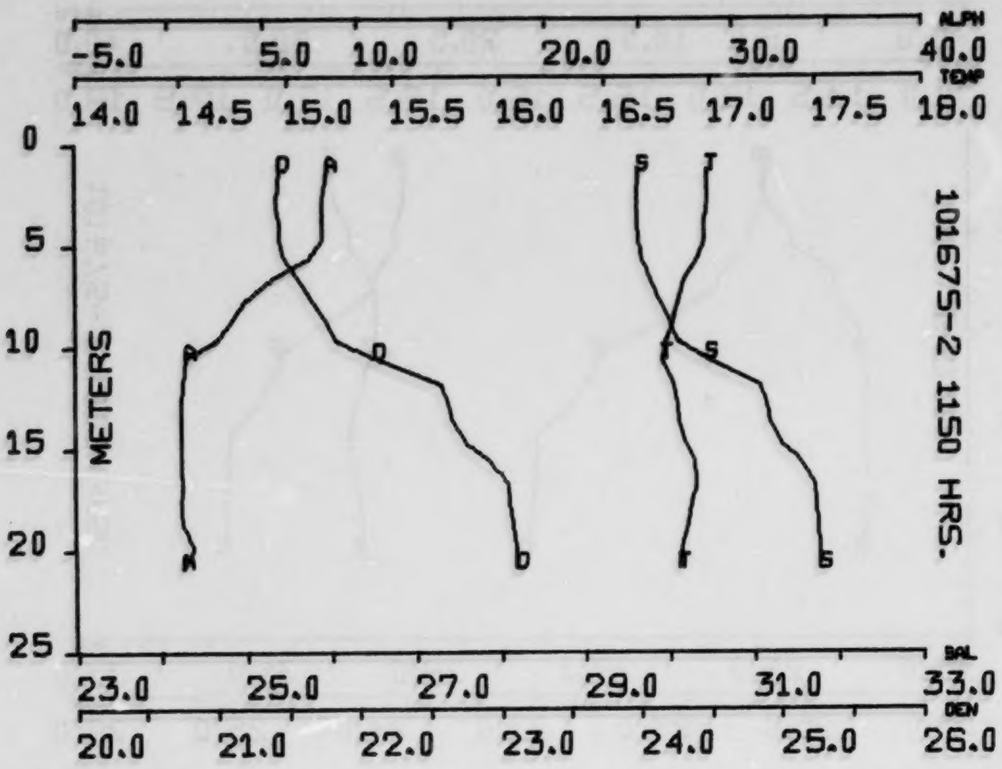
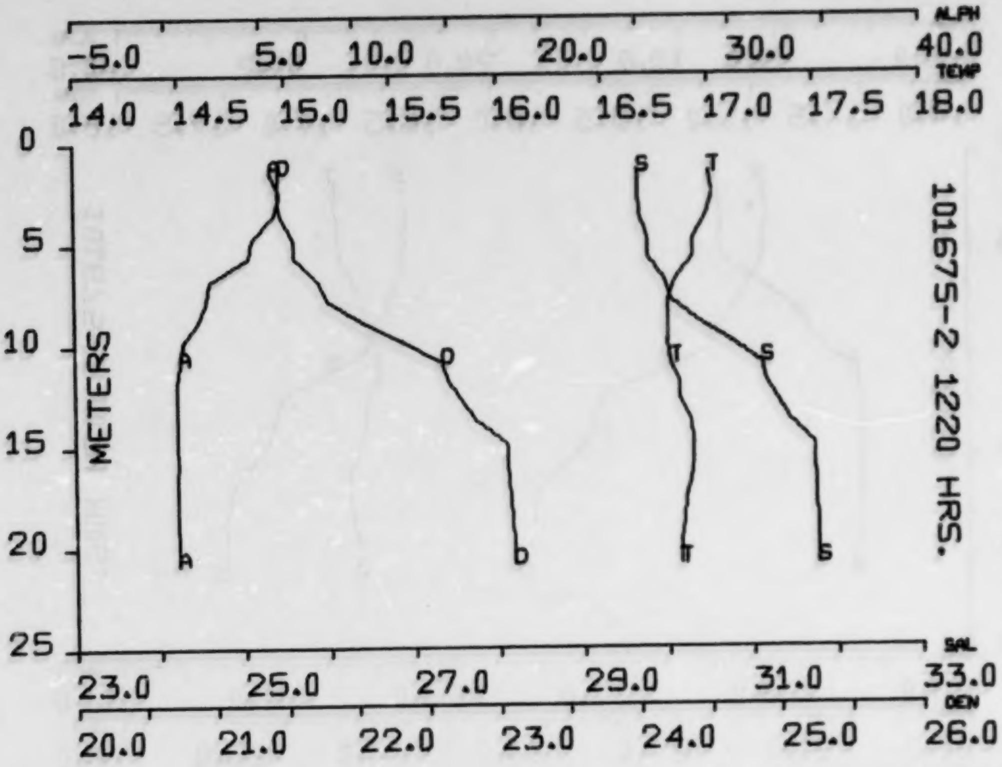
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
3.0	29.61	16.96	21.42	33	11.26
4.0	29.66	16.93	21.46	37	10.03
5.0	29.73	16.89	21.53	49	7.08
6.0	29.84	16.86	21.62	56	5.79
7.0	29.90	16.83	21.67	52	6.55
8.0	29.99	16.82	21.74	56	5.72
9.0	30.06	16.79	21.80	78	2.62
10.0	30.16	16.76	21.89	94	.64
11.0	30.81	16.79	22.38	94	.65
12.0	31.10	16.83	22.59	93	.69
13.0	31.16	16.84	22.63	94	.62
14.0	31.19	16.85	22.65	94	.59
15.0	31.27	16.86	22.71	94	.64
16.0	31.46	16.90	22.85	94	.62
17.0	31.66	16.93	23.00	94	.59
18.0	31.74	16.92	23.06	94	.57
19.0	31.77	16.89	23.09	94	.58
20.0	31.78	16.86	23.10	94	.61



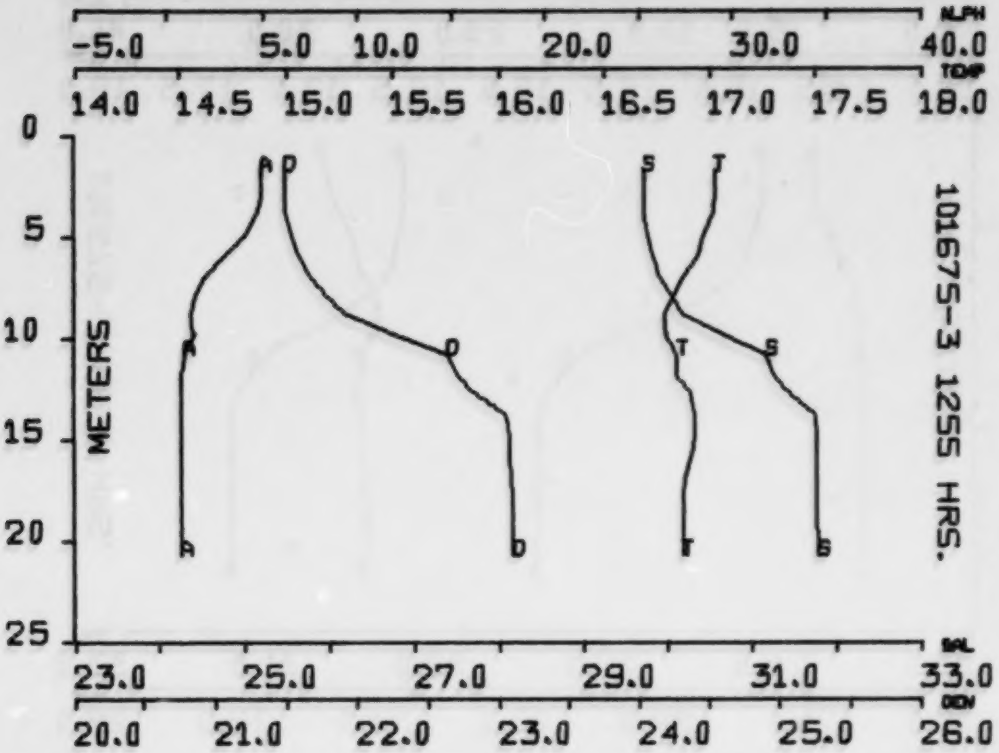
STATION 101675-2 1150 HRS.
AT DUMPSITE 88 MINUTES AFTER DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	29.65	16.98	21.45	43	8.45
1.0	29.63	16.98	21.43	44	8.29
2.0	29.61	16.98	21.42	44	8.13
3.0	29.61	16.98	21.42	45	8.00
4.0	29.64	16.96	21.44	45	7.96
5.0	29.66	16.95	21.46	46	7.67
6.0	29.73	16.90	21.53	53	6.41
7.0	29.84	16.86	21.62	62	4.84
8.0	29.95	16.83	21.71	69	3.66
9.0	30.05	16.80	21.80	75	2.89
10.0	30.26	16.77	21.96	85	1.69
11.0	30.70	16.79	22.30	93	.72
12.0	31.11	16.83	22.59	94	.62
13.0	31.18	16.84	22.64	95	.54
14.0	31.26	16.86	22.70	95	.54
15.0	31.42	16.90	22.82	95	.55
16.0	31.63	16.93	22.97	94	.60
17.0	31.74	16.92	23.06	94	.61
18.0	31.75	16.89	23.07	94	.59
19.0	31.77	16.87	23.09	92	.85
20.0	31.78	16.85	23.11	89	1.12



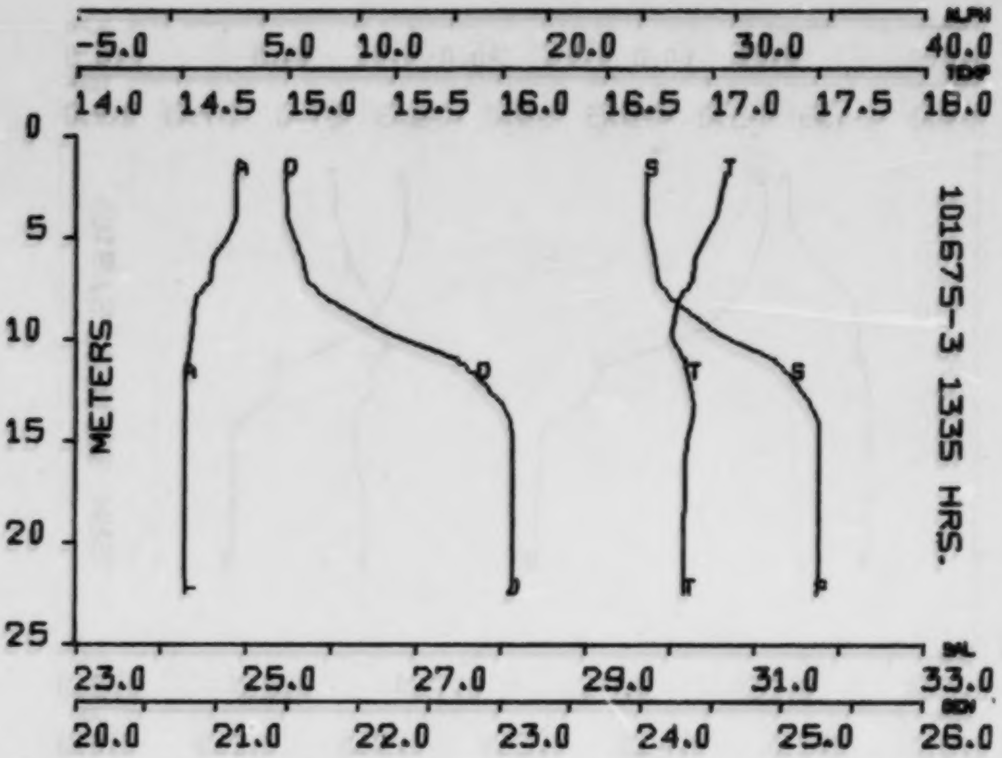
STATION 101675-2 1220 HRS.
AT DUMPSITE 118 MINUTES AFTER DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	29.68	16.98	21.47	62	4.69
1.0	29.67	17.00	21.46	59	5.28
2.0	29.67	17.01	21.45	56	5.86
3.0	29.67	17.00	21.46	56	5.84
4.0	29.72	16.96	21.51	60	5.18
5.0	29.79	16.92	21.56	64	4.43
6.0	29.85	16.90	21.62	69	3.71
7.0	30.00	16.83	21.75	80	2.18
8.0	30.13	16.80	21.86	82	1.94
9.0	30.44	16.80	22.09	87	1.43
10.0	30.81	16.81	22.37	93	.75
11.0	31.13	16.83	22.61	95	.56
12.0	31.23	16.86	22.68	96	.44
13.0	31.36	16.88	22.78	95	.46
14.0	31.54	16.92	22.91	95	.47
15.0	31.75	16.93	23.07	96	.44
16.0	31.76	16.92	23.07	95	.48
17.0	31.77	16.90	23.08	96	.46
18.0	31.78	16.88	23.10	95	.47
19.0	31.79	16.87	23.11	95	.48
20.0	31.79	16.86	23.11	95	.51



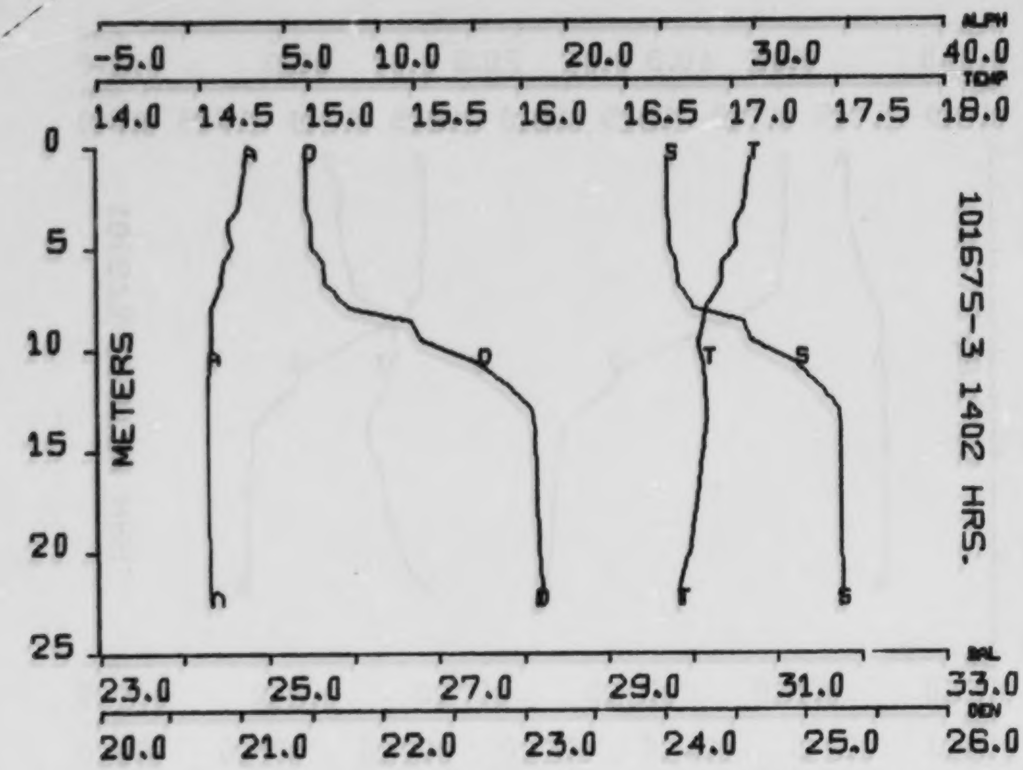
STATION 101675-3 1255 HRS.
AT DUMPSITE 153 MINUTES AFTER DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	29.71	17.02	21.49	62	4.76
1.0	29.71	17.02	21.48	62	4.82
2.0	29.70	17.02	21.48	61	4.88
3.0	29.71	17.02	21.48	62	4.81
4.0	29.73	16.99	21.51	64	4.44
5.0	29.78	16.96	21.55	68	3.82
6.0	29.84	16.92	21.60	76	2.74
7.0	29.93	16.86	21.69	84	1.79
8.0	30.08	16.81	21.82	88	1.28
9.0	30.33	16.78	22.01	89	1.19
10.0	30.79	16.80	22.36	89	1.20
11.0	31.19	16.84	22.66	93	.76
12.0	31.32	16.86	22.75	94	.64
13.0	31.56	16.92	22.92	94	.65
14.0	31.75	16.93	23.06	94	.65
15.0	31.76	16.92	23.07	94	.65
16.0	31.77	16.90	23.08	94	.64
17.0	31.77	16.88	23.09	94	.66
18.0	31.78	16.87	23.10	94	.67
19.0	31.78	16.87	23.10	93	.69
20.0	31.79	16.86	23.11	93	.69



STATION 101675-3 1335 HRS.
AT DUMPSITE 193 MINUTES AFTER DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	29.69	17.09	21.45	72	3.31
1.0	29.70	17.07	21.46	71	3.35
2.0	29.71	17.05	21.48	71	3.40
3.0	29.72	17.02	21.49	71	3.44
4.0	29.72	17.01	21.50	71	3.39
5.0	29.77	16.95	21.55	75	2.86
6.0	29.83	16.91	21.61	81	2.13
7.0	29.87	16.90	21.63	81	2.09
8.0	30.05	16.83	21.79	88	1.26
9.0	30.37	16.81	22.03	90	1.11
10.0	30.76	16.82	22.33	90	1.02
11.0	31.25	16.87	22.70	92	.85
12.0	31.48	16.89	22.87	93	.75
13.0	31.66	16.91	23.00	93	.76
14.0	31.76	16.90	23.08	93	.73
15.0	31.76	16.87	23.09	93	.75
16.0	31.76	16.87	23.09	93	.75
17.0	31.77	16.86	23.09	93	.75
18.0	31.77	16.87	23.09	93	.74
19.0	31.77	16.86	23.09	93	.75
20.0	31.77	16.87	23.09	92	.78
21.0	31.77	16.87	23.09	93	.76
22.0	31.76	16.87	23.08	91	.92



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*                                                                    *
*    STATION  101675-3   1402  HRS.                                  *
*    AT DUMPSITE 220 MINUTES AFTER DISCHARGE                         *
*                                                                    *
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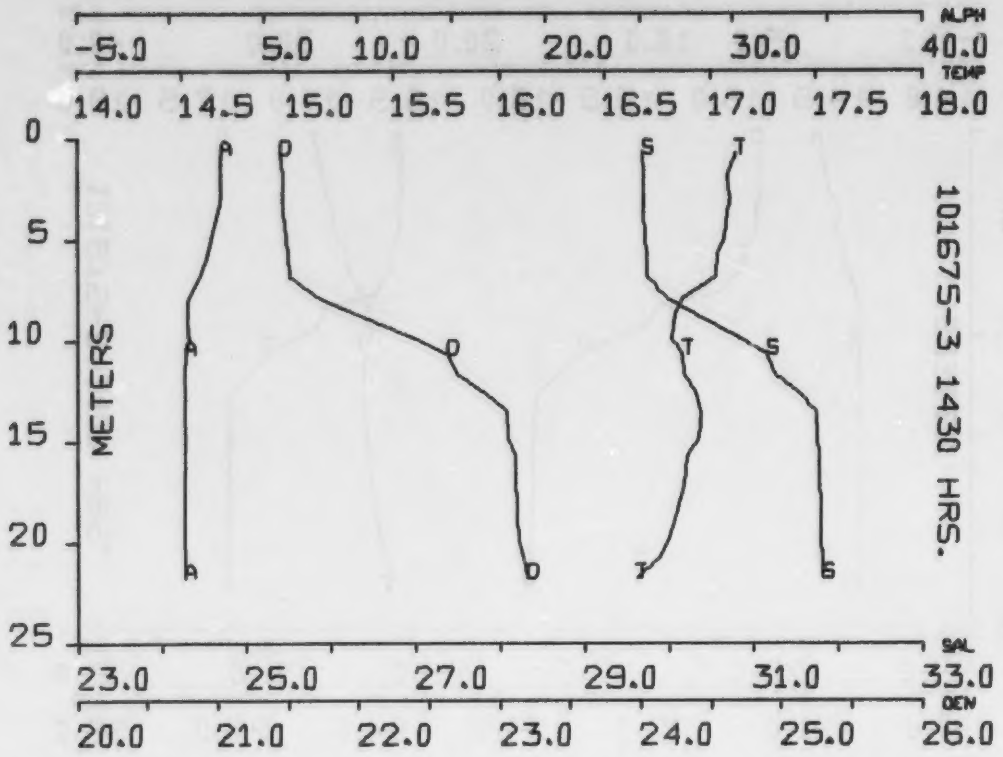
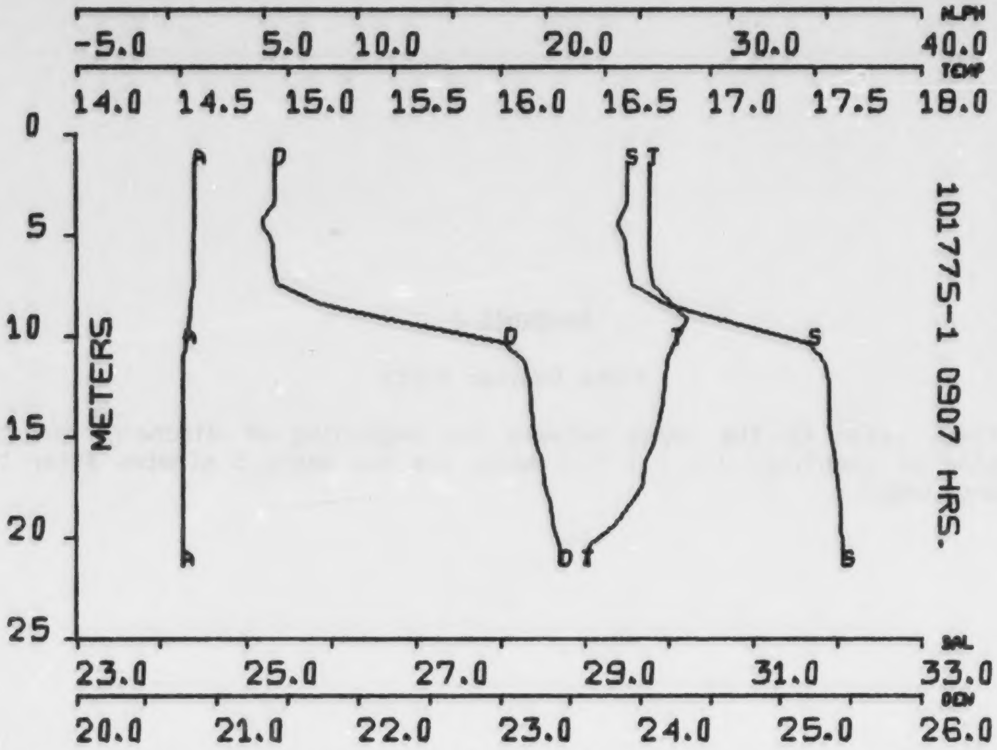
DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	29.69	17.08	21.46	75	2.90
1.0	29.71	17.07	21.47	76	2.79
2.0	29.71	17.05	21.48	77	2.64
3.0	29.72	17.04	21.48	79	2.42
4.0	29.74	17.01	21.51	82	1.99
5.0	29.77	17.00	21.54	82	2.02
6.0	29.84	16.94	21.60	85	1.57
7.0	29.91	16.91	21.66	87	1.38
8.0	30.15	16.86	21.86	91	.99
9.0	30.66	16.84	22.25	90	1.01
10.0	30.94	16.84	22.47	91	.93
11.0	31.33	16.86	22.76	92	.86
12.0	31.57	16.87	22.94	92	.81
13.0	31.74	16.87	23.07	92	.81
14.0	31.76	16.86	23.09	92	.83
15.0	31.77	16.84	23.09	92	.83
16.0	31.77	16.83	23.10	92	.83
17.0	31.77	16.82	23.10	92	.83
18.0	31.77	16.81	23.11	92	.86
19.0	31.78	16.79	23.12	91	.92
20.0	31.78	16.77	23.12	91	.95
21.0	31.79	16.74	23.13	92	.88
22.0	31.77	16.73	23.12	91	.93



STATION 101675-3 1430 HRS.
AT DUMPSITE 248 MINUTES AFTER DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	29.68	17.14	21.43	77	2.68
1.0	29.69	17.10	21.45	77	2.66
2.0	29.71	17.08	21.47	77	2.67
3.0	29.71	17.09	21.46	77	2.67
4.0	29.71	17.07	21.48	79	2.38
5.0	29.73	17.05	21.49	81	2.12
6.0	29.75	17.03	21.51	83	1.84
7.0	29.80	16.99	21.56	87	1.38
8.0	30.05	16.85	21.79	92	.86
9.0	30.49	16.82	22.13	91	.90
10.0	30.92	16.83	22.45	91	.91
11.0	31.20	16.87	22.66	93	.76
12.0	31.38	16.90	22.79	93	.75
13.0	31.65	16.94	22.98	93	.76
14.0	31.75	16.95	23.06	93	.76
15.0	31.77	16.92	23.08	93	.76
16.0	31.79	16.88	23.11	93	.75
17.0	31.79	16.87	23.11	93	.75
18.0	31.80	16.84	23.12	93	.75
19.0	31.81	16.82	23.13	93	.75
20.0	31.82	16.78	23.15	93	.75
21.0	31.83	16.72	23.18	93	.77



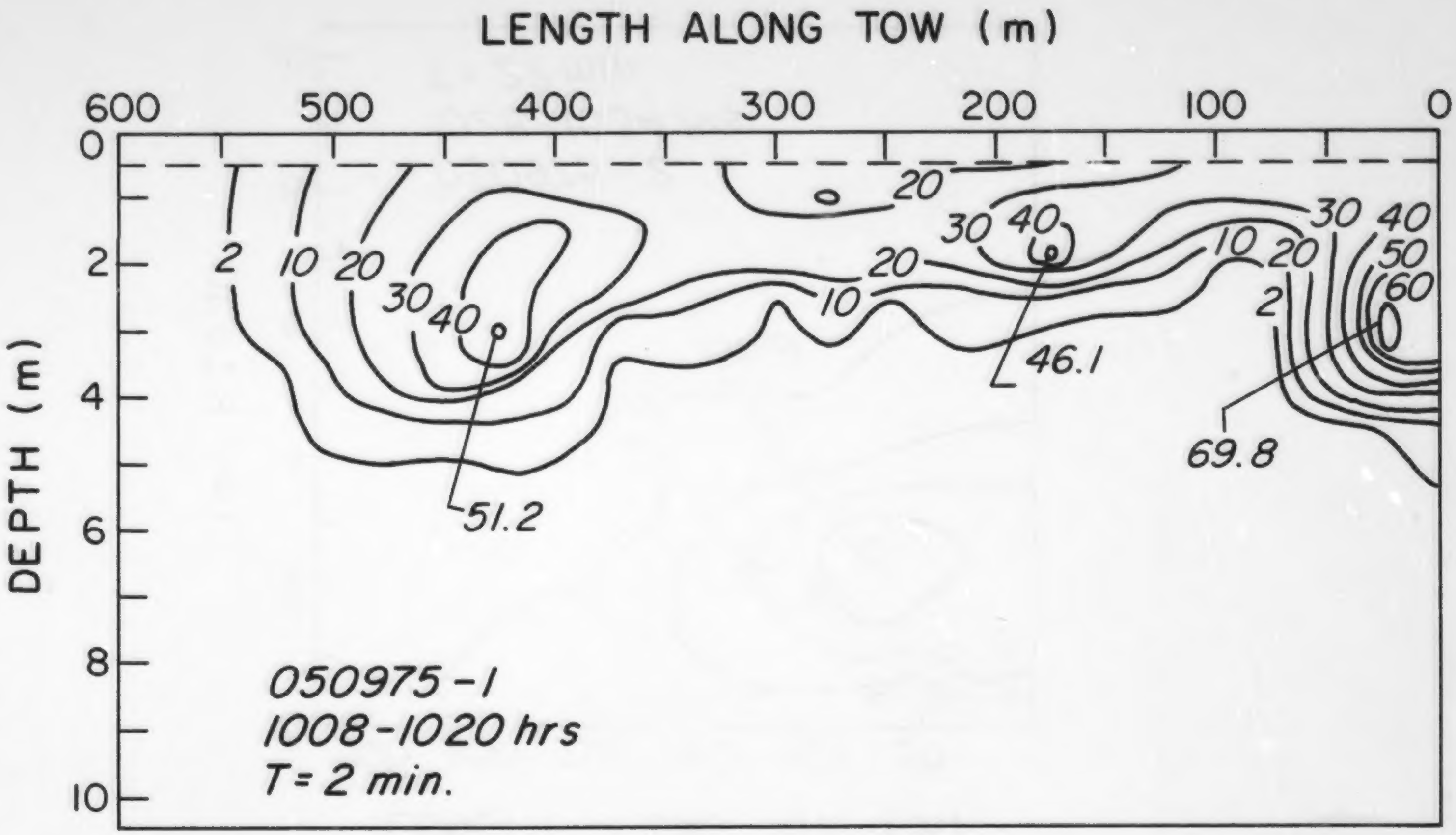
STATION 101775-1 0907 HRS.
AT DUMPSITE BEFORE SLUDGE DISCHARGE

DEPTH (M)	SALINITY (PPT)	TEMPERATURE (C)	SIGMA-T	TRANSMIT. (%)	ALPHA (M-1)
0	29.50	16.69	21.40	89	1.22
1.0	29.50	16.70	21.40	89	1.22
2.0	29.50	16.70	21.39	89	1.21
3.0	29.50	16.71	21.39	89	1.21
4.0	29.40	16.71	21.32	89	1.22
5.0	29.46	16.70	21.37	89	1.18
6.0	29.50	16.70	21.40	89	1.16
7.0	29.54	16.72	21.42	89	1.16
8.0	29.82	16.79	21.62	90	1.07
9.0	30.55	16.88	22.16	91	.95
10.0	31.44	16.83	22.85	93	.75
11.0	31.81	16.79	23.14	94	.67
12.0	31.89	16.77	23.20	94	.63
13.0	31.91	16.76	23.22	94	.61
14.0	31.91	16.75	23.23	94	.60
15.0	31.94	16.72	23.25	94	.61
16.0	31.98	16.68	23.29	94	.62
17.0	32.00	16.67	23.32	94	.61
18.0	32.03	16.62	23.35	94	.61
19.0	32.05	16.55	23.38	94	.60
20.0	32.06	16.45	23.41	94	.59
21.0	32.07	16.40	23.43	94	.62

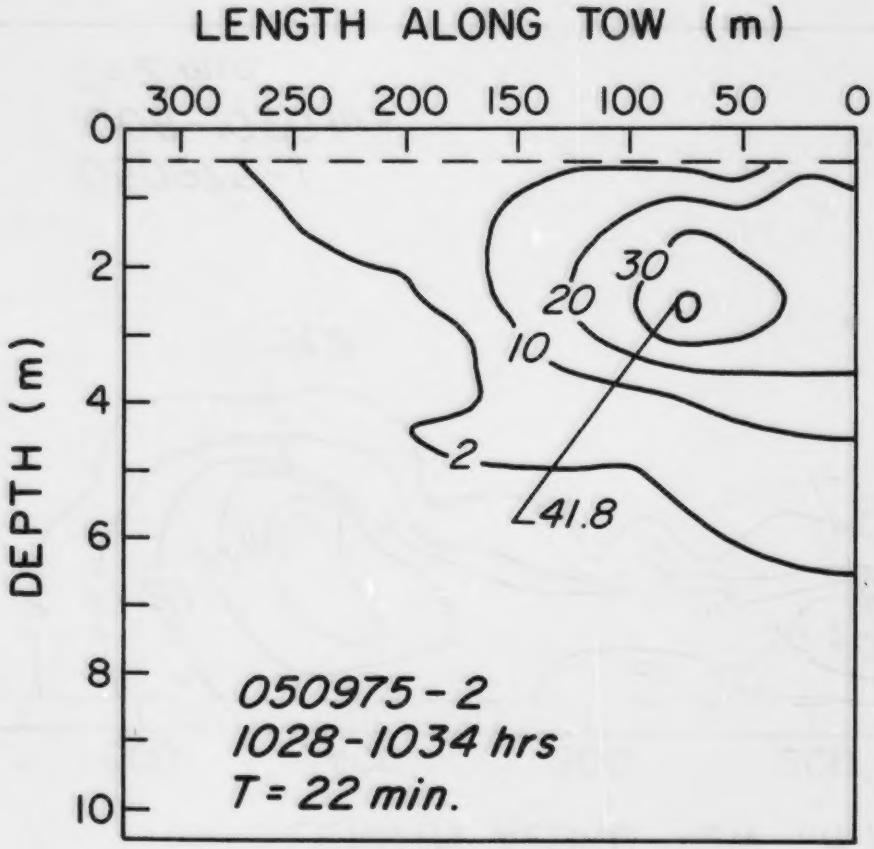
APPENDIX C

Alpha Contour Plots

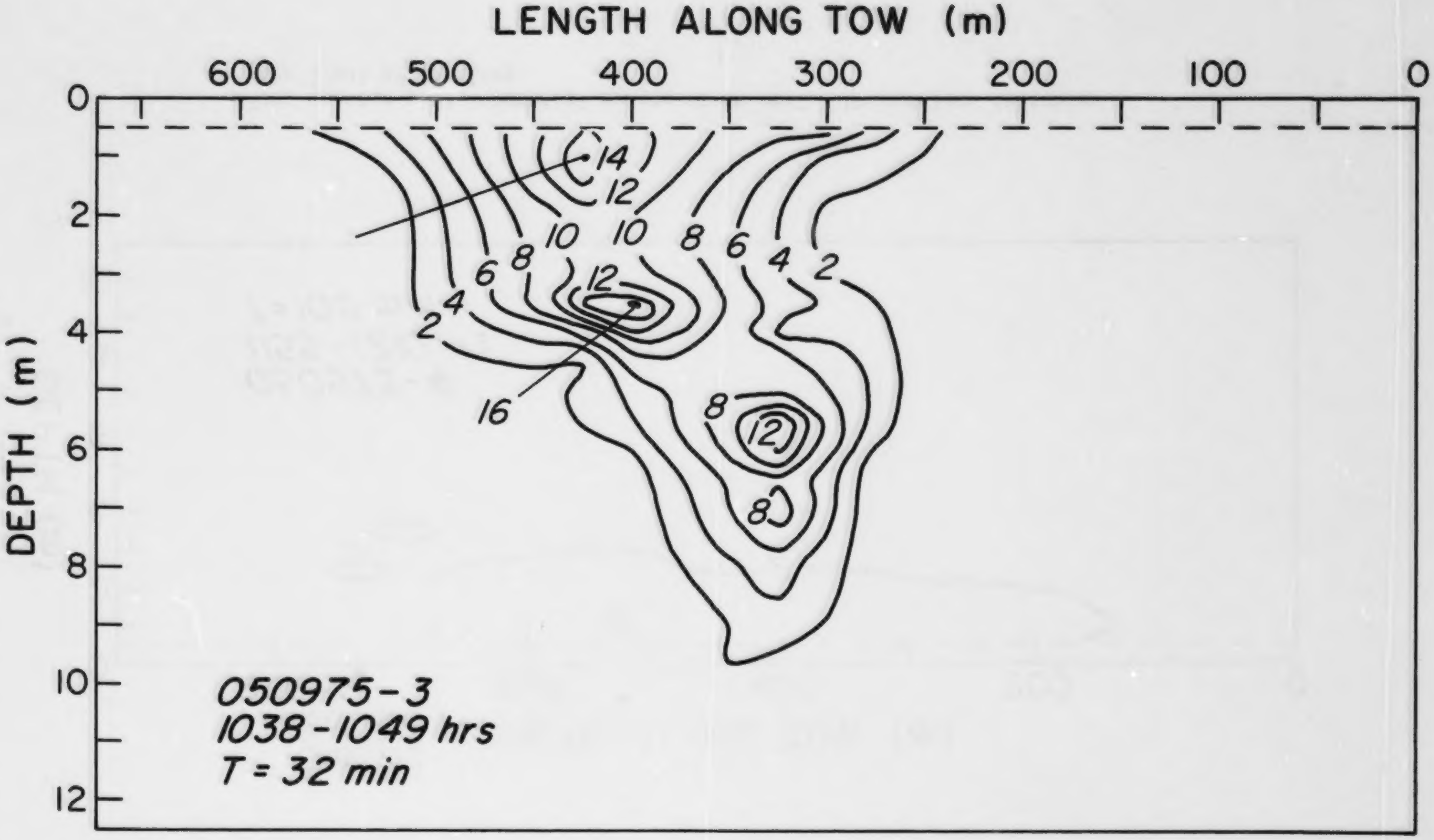
Times refer to the lapse between the beginning of discharge and the beginning of sampling; i.e., T = 5 means the tow began 5 minutes after the discharge began.



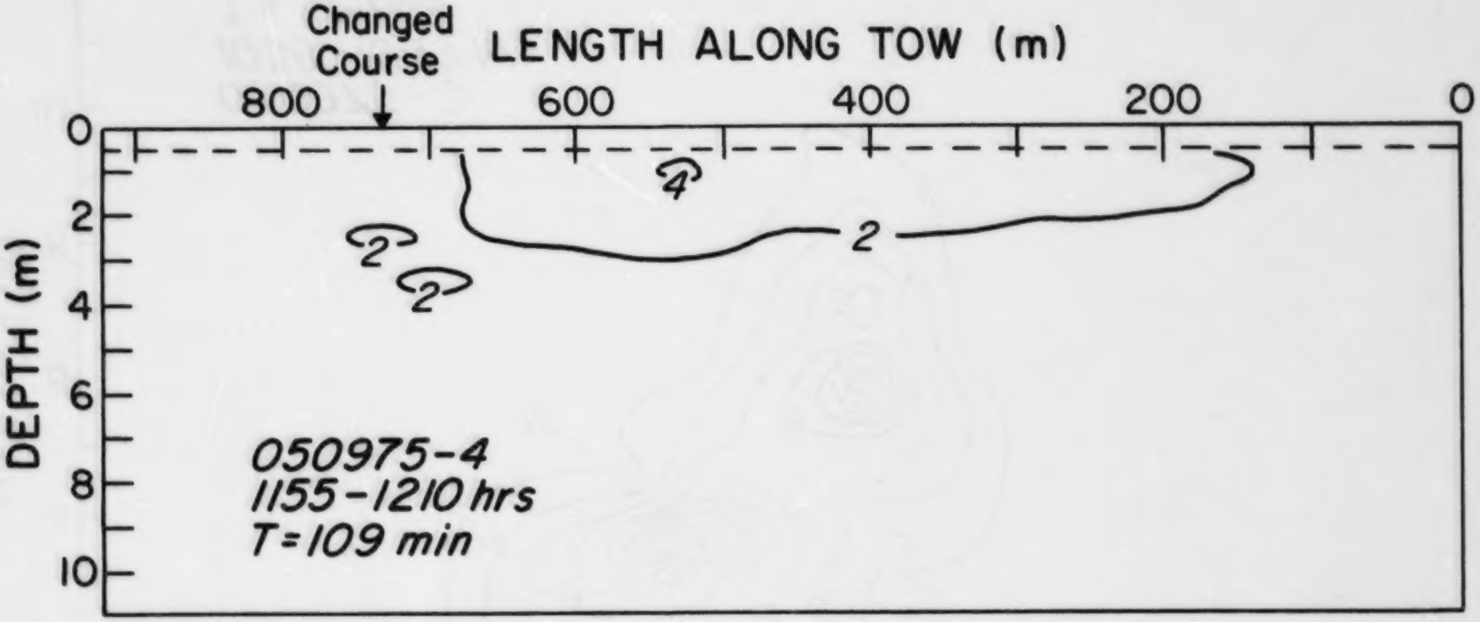
Alpha contour plot. Vertical exaggeration 30:1. Dashed line indicates upper limit of sampling.



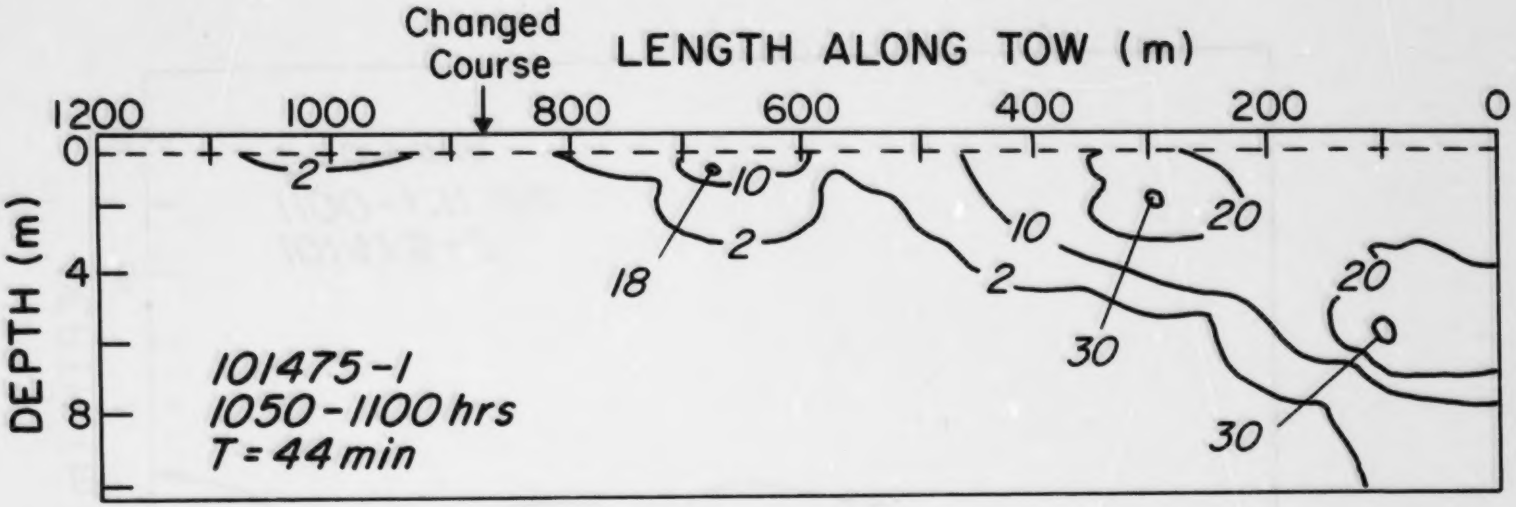
Alpha contour plot. Vertical exaggeration 30:1. Dashed line indicates upper limit of sampling.



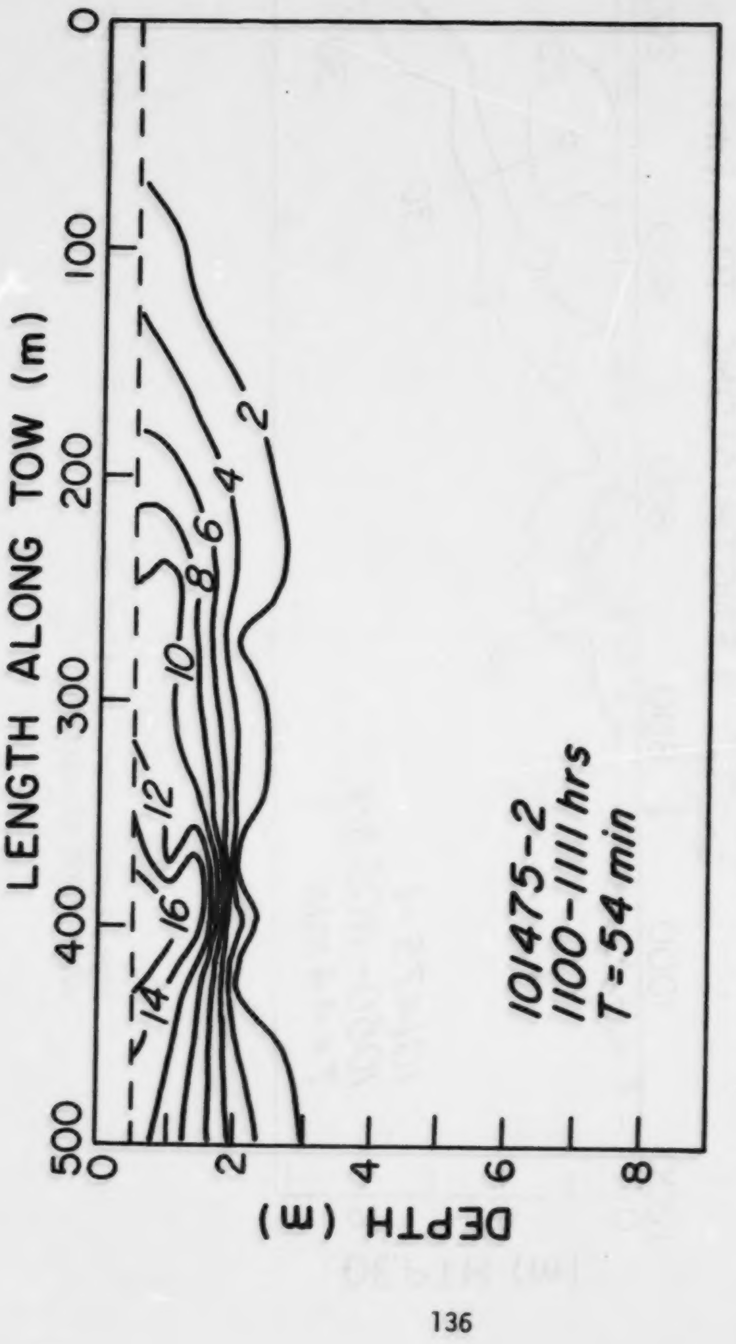
Alpha contour plot. Vertical exaggeration 30:1. Dashed line indicates upper limit of sampling.



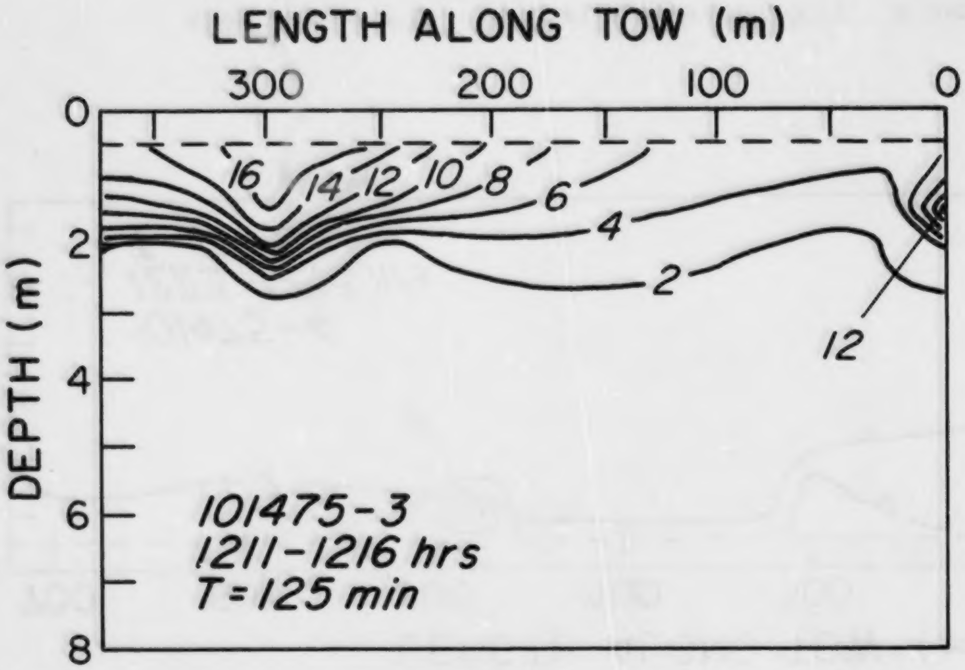
Alpha contour plot. Vertical exaggeration 30:1. Dashed line indicates upper limit of sampling.



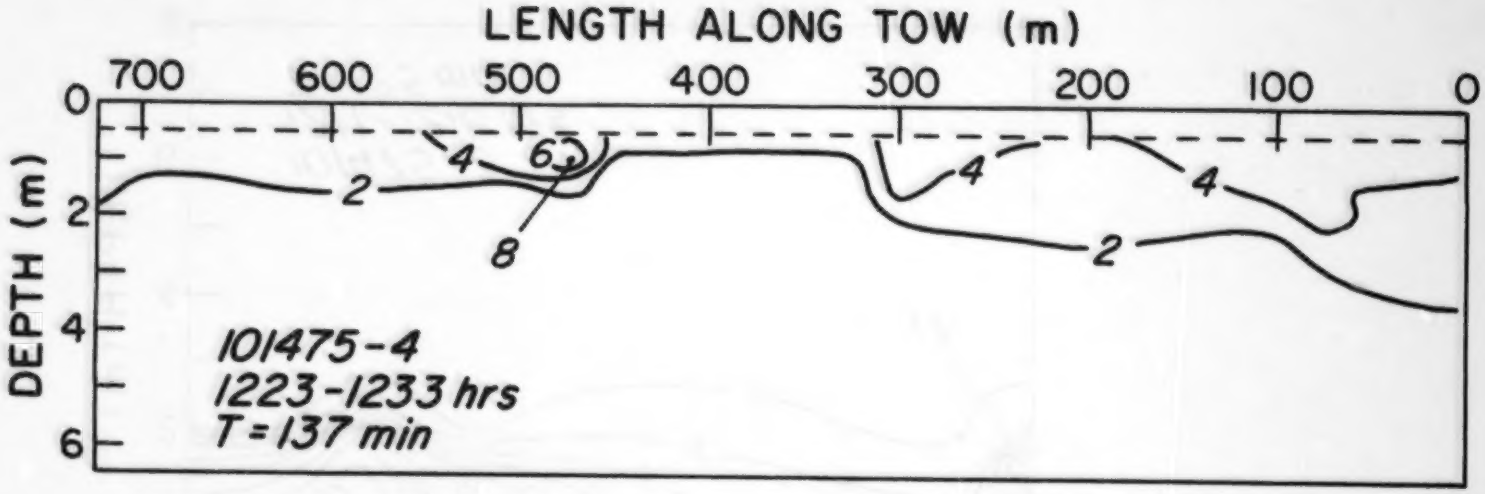
Alpha contour plot. Vertical exaggeration 30:1. Dashed line indicates upper limit of sampling.



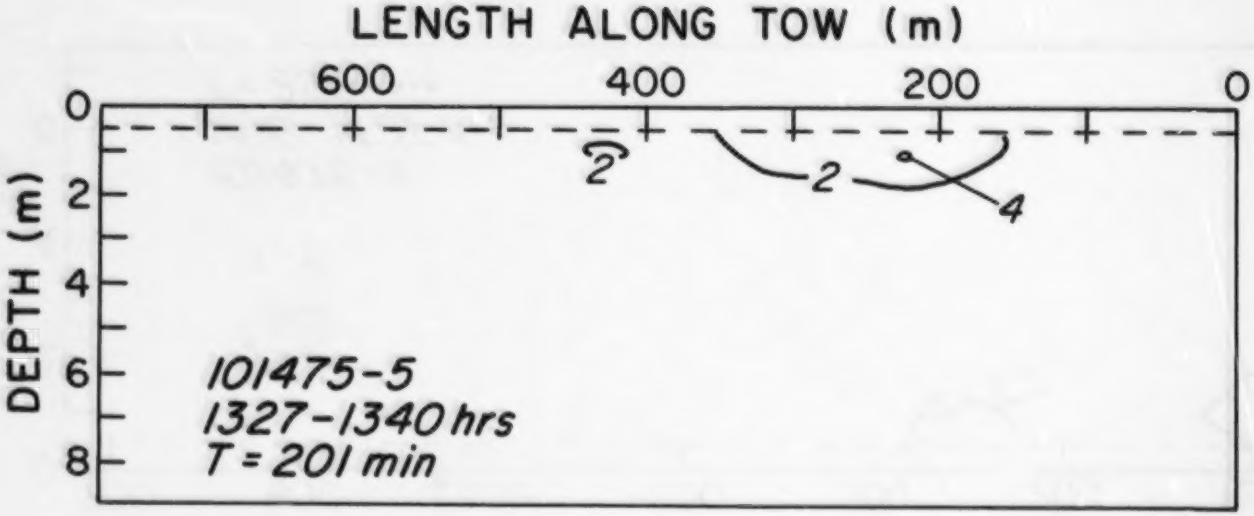
Alpha contour plot. Vertical exaggeration 30:1. Dashed line indicates upper limit of sampling.



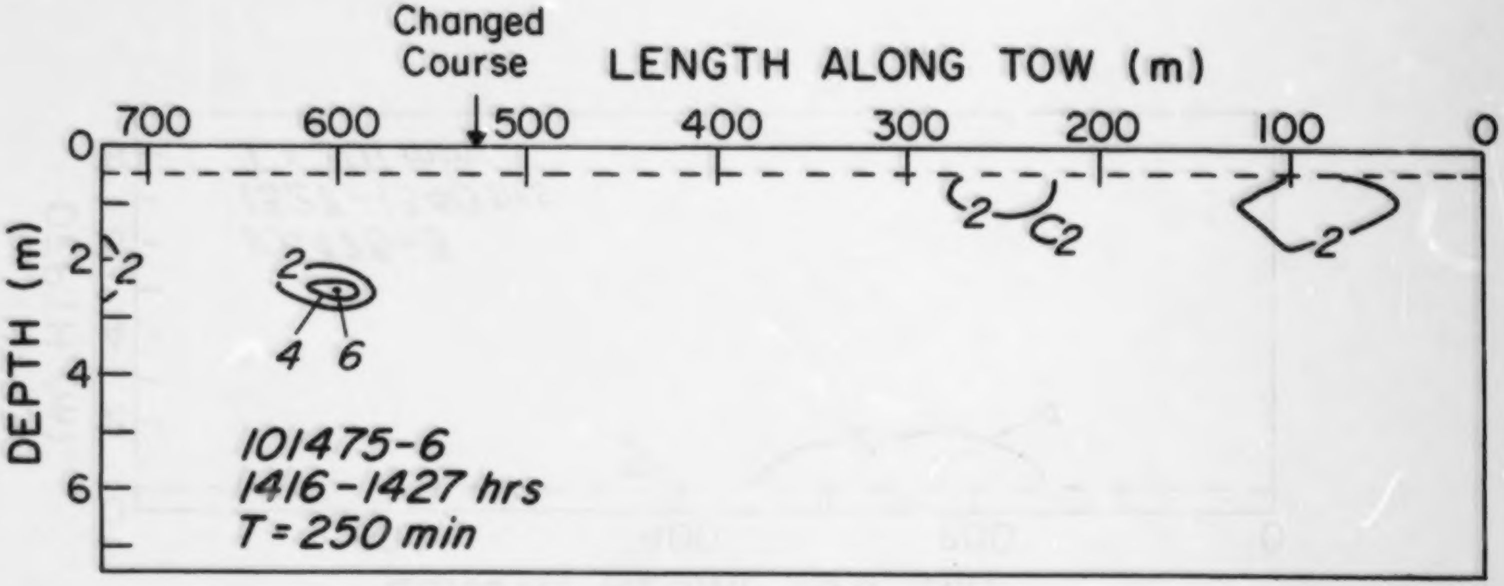
Alpha contour plot. Vertical exaggeration 30:1. Dashed line indicates upper limit of sampling.



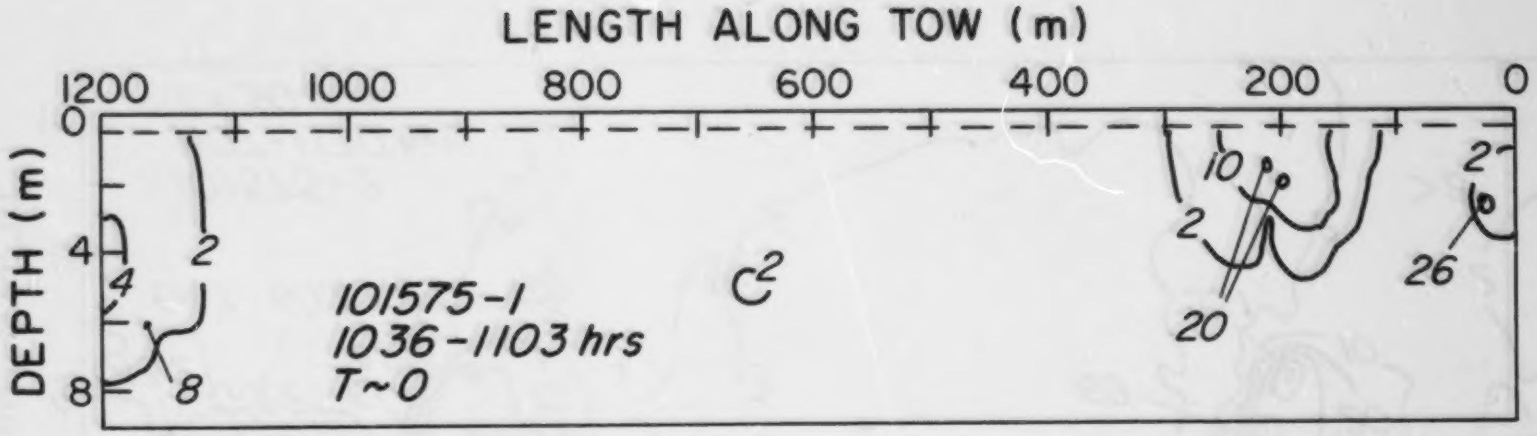
Alpha contour plot. Vertical exaggeration 30:1. Dashed line indicates upper limit of sampling.



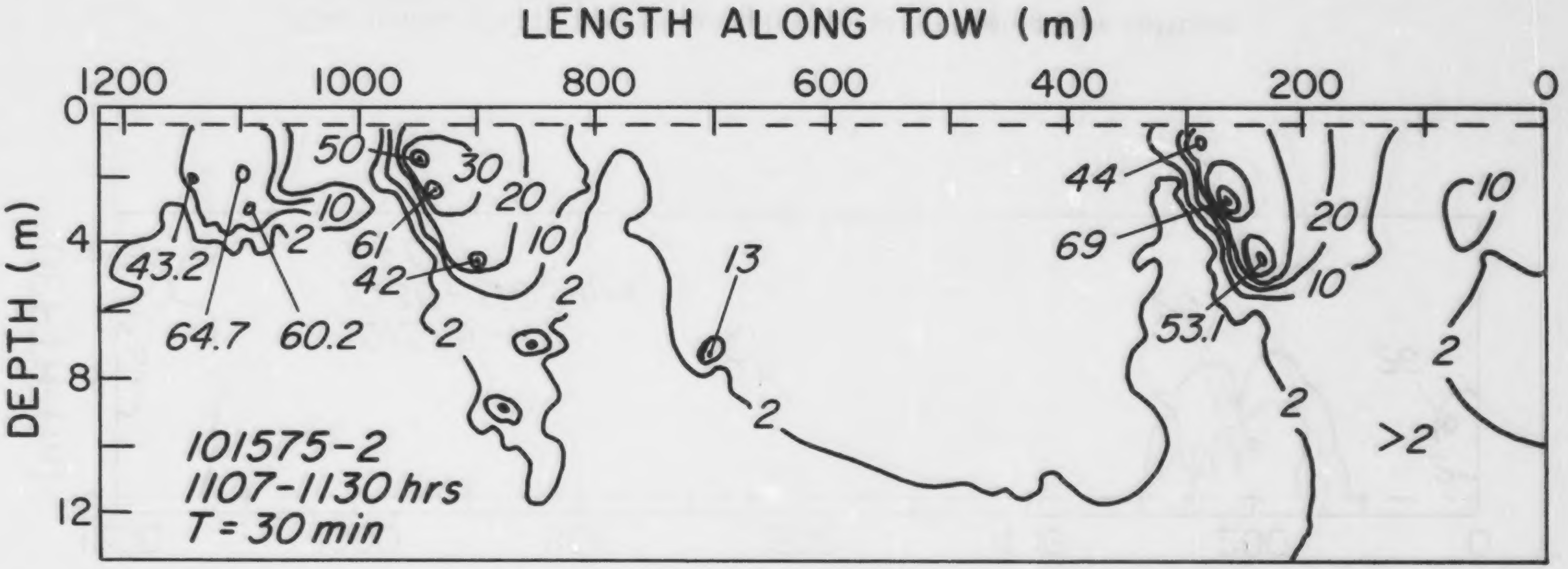
Alpha contour plot. Vertical exaggeration 30:1. Dashed line indicates upper limit of sampling.



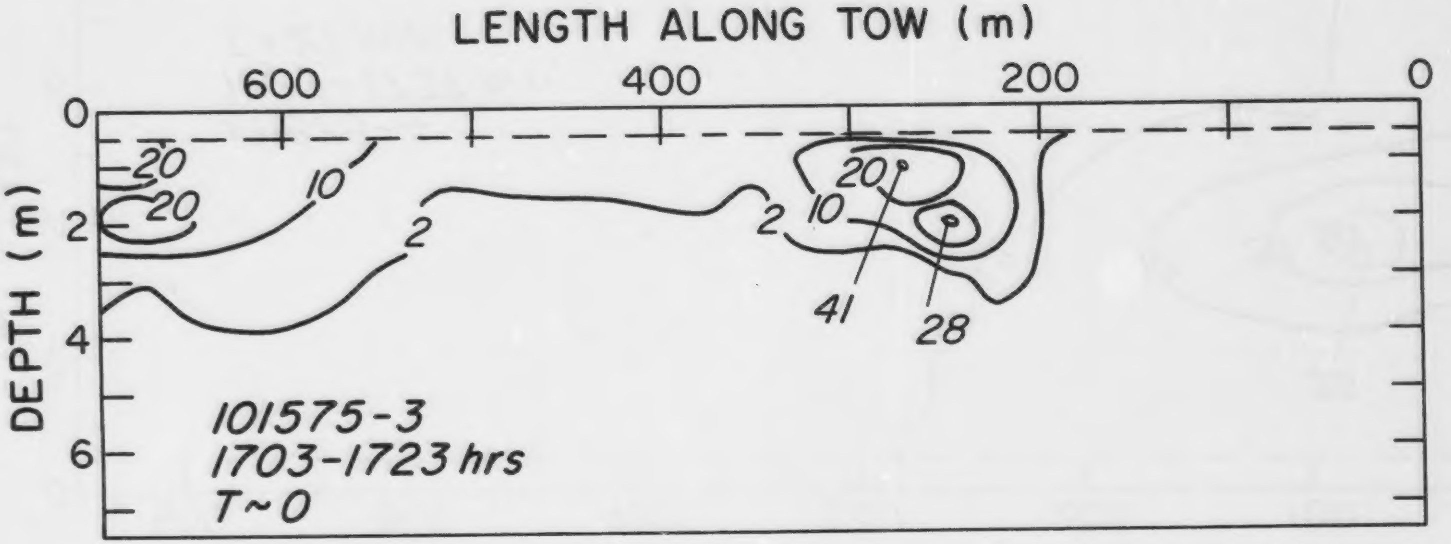
Alpha contour plot. Vertical exaggeration 30:1. Dashed line indicates upper limit of sampling.



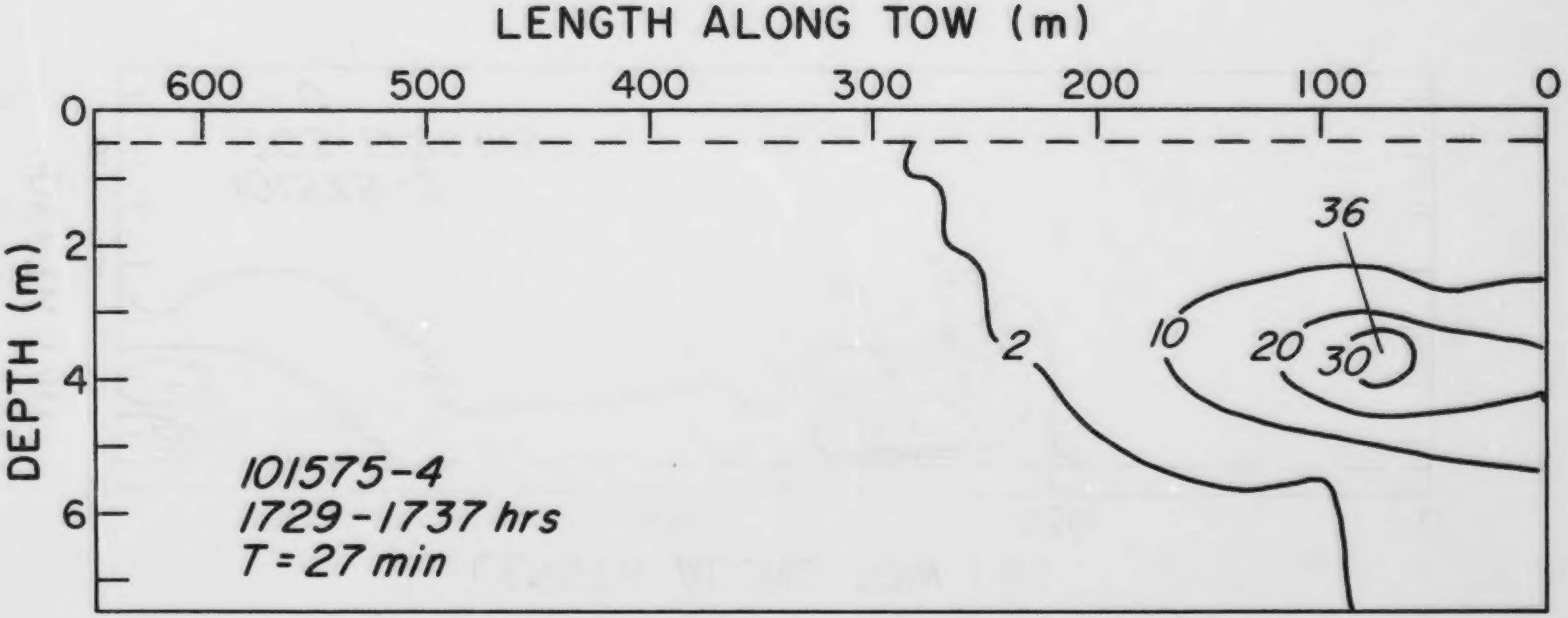
Alpha contour plot. Vertical exaggeration 30:1. Dashed line indicates upper limit of sampling.



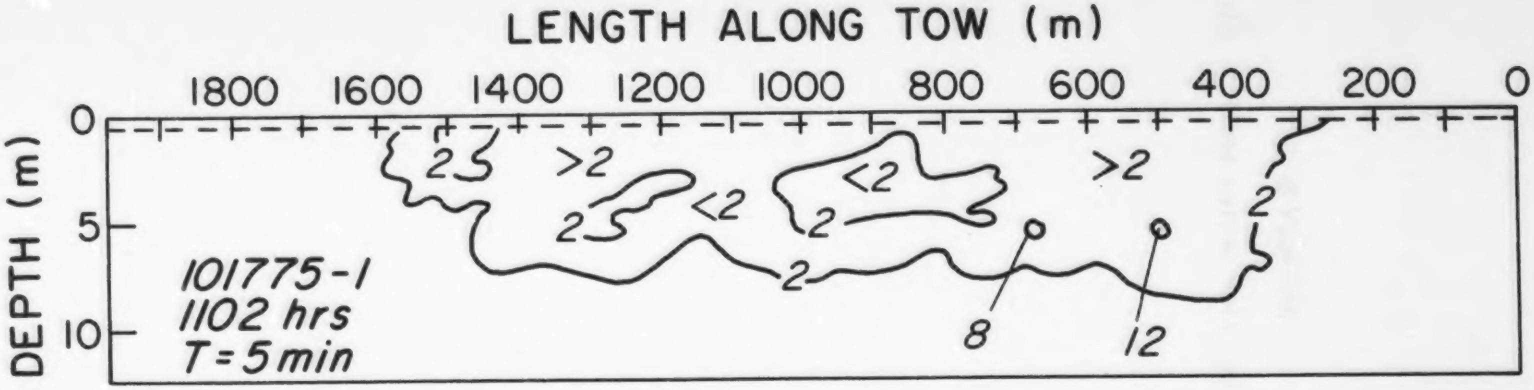
Alpha contour plot. Vertical exaggeration 30:1. Dashed line indicates upper limit of sampling.



Alpha contour plot. Vertical exaggeration 30:1. Dashed line indicates upper limit of sampling.



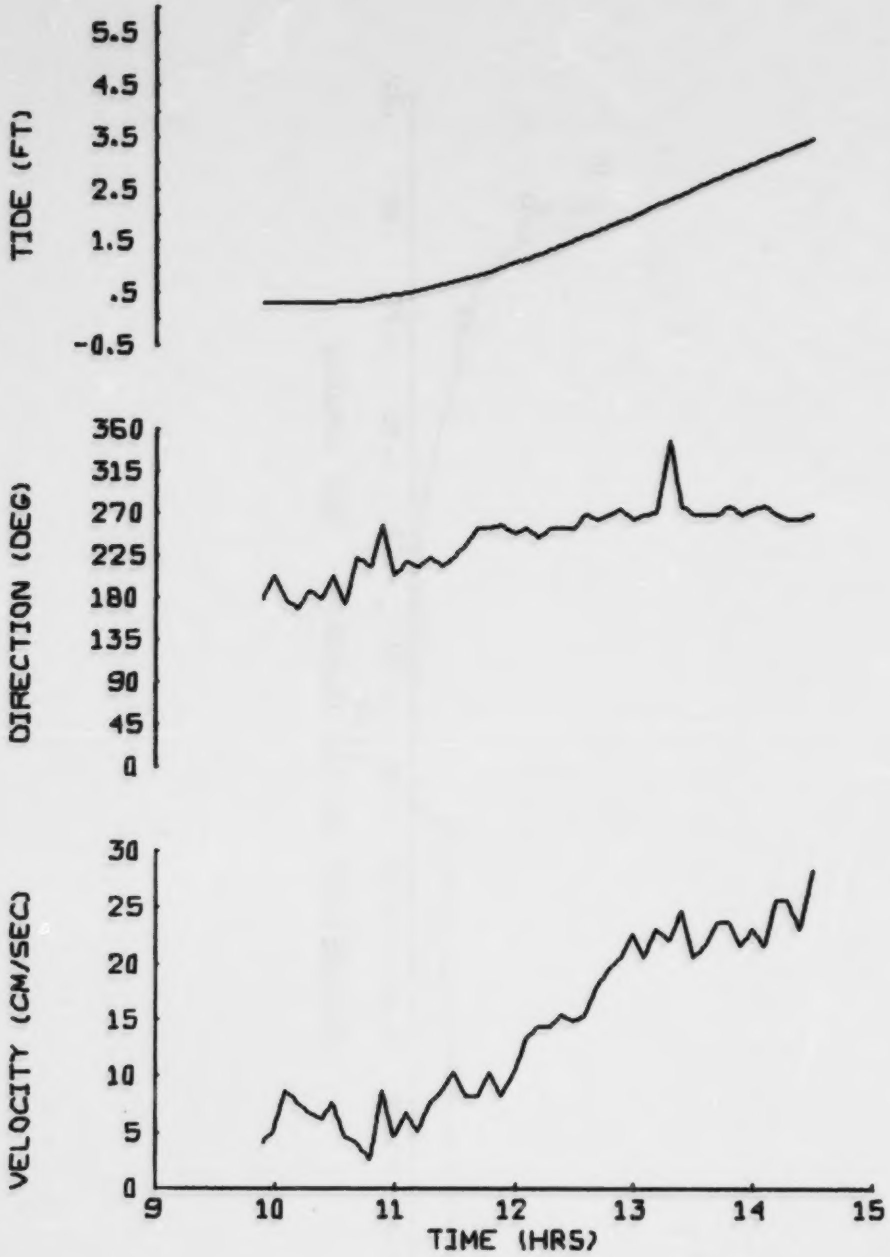
Alpha contour plot. Vertical exaggeration 30:1. Dashed line indicates upper limit of sampling.



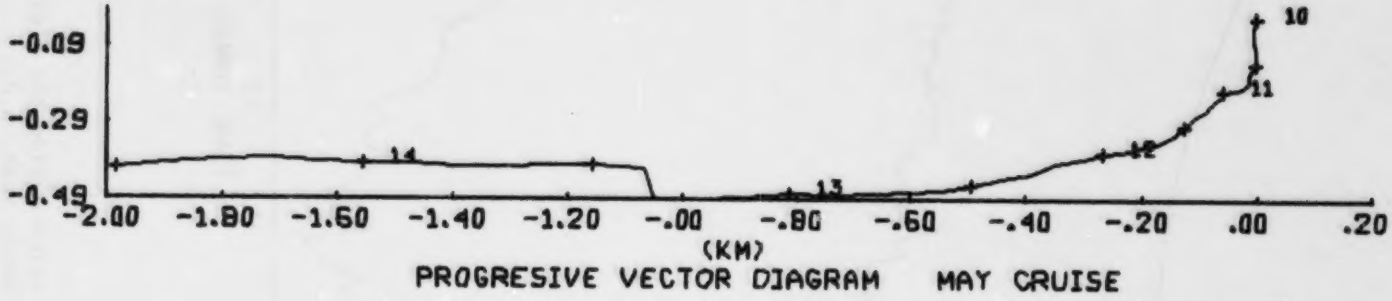
Alpha contour plot. Vertical exaggeration 30:1. Dashed line indicates upper limit of sampling.

APPENDIX D

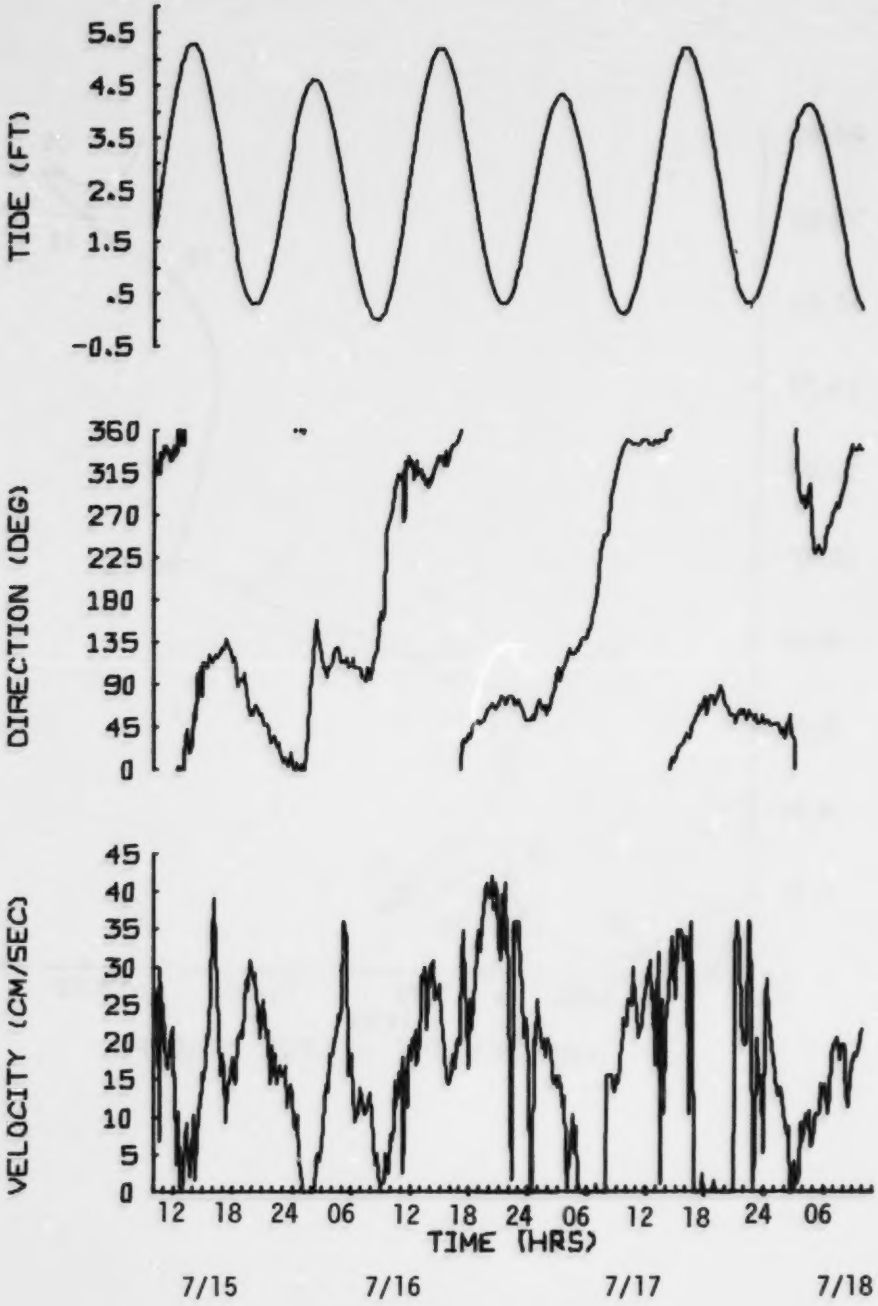
Current Meter Time Series and P.V. Plots



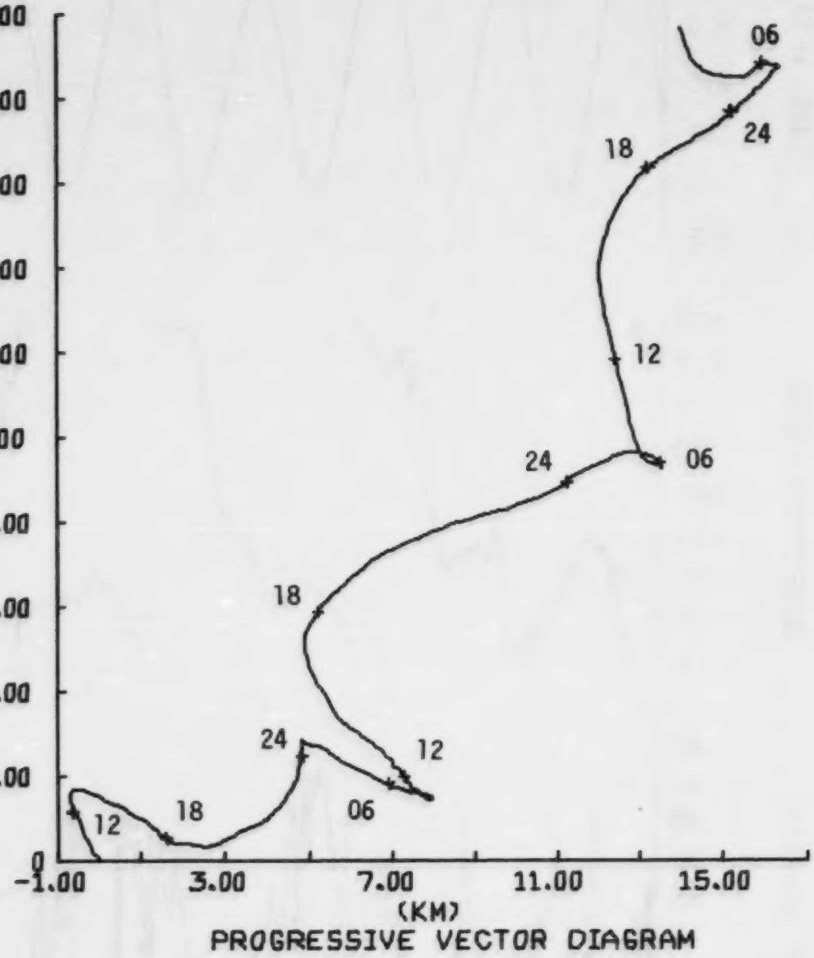
Plot of time series currents taken during the field experiment on 050675. Tides are those predicted at Sandy Hook, N.J.



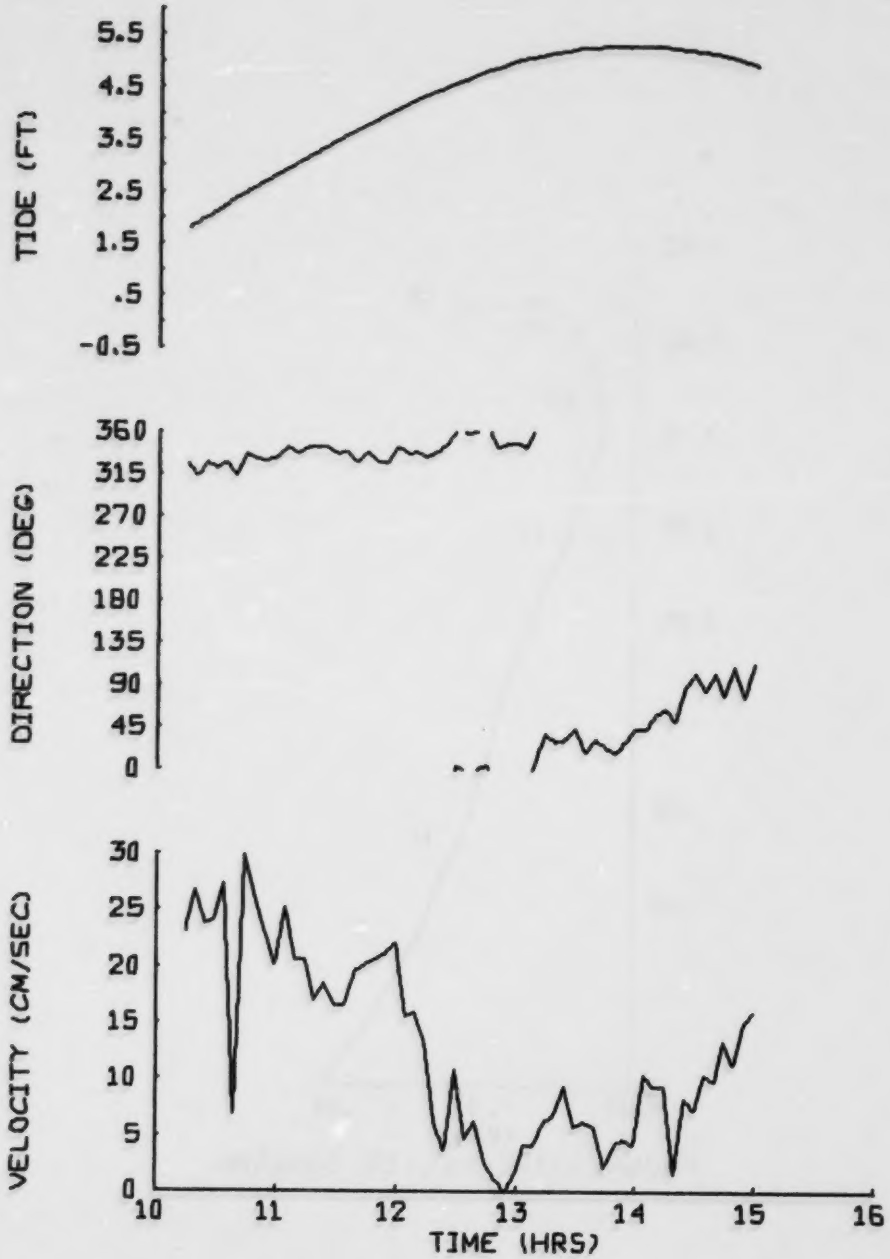
Progressive vector plot made from measurements made during the field experiment on 050675. True north is toward the top of the plot.



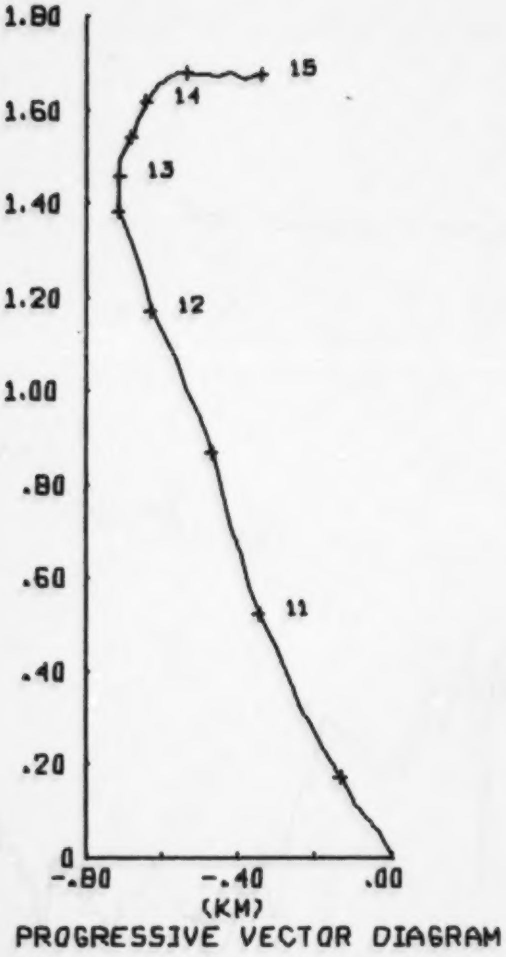
Plot of time series currents taken at the dumpsite between 071575 and 071875. Tides are those predicted at Sandy Hook, N. J.



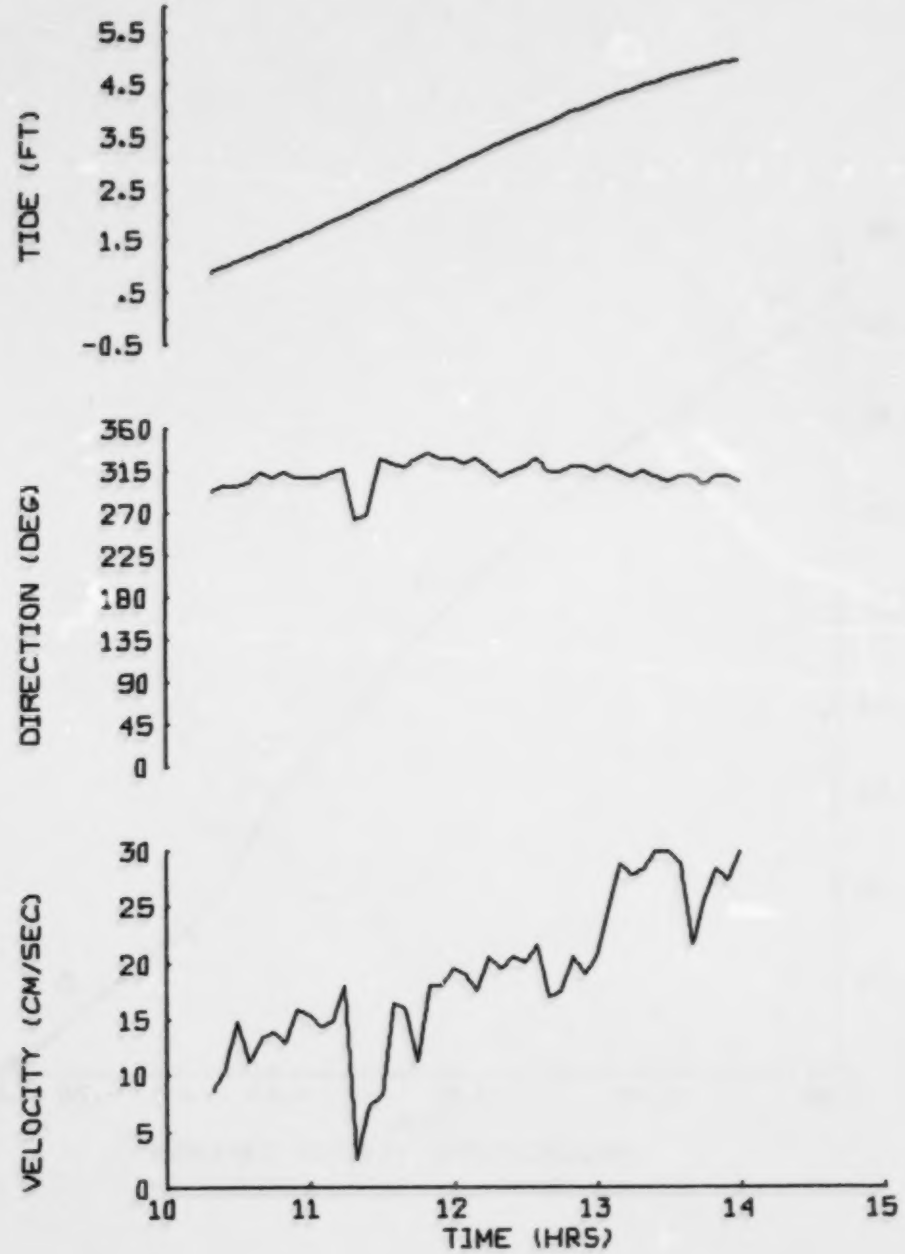
Progressive vector plot made from measurements made between 071575 and 071875. True north is toward the top of the plot.



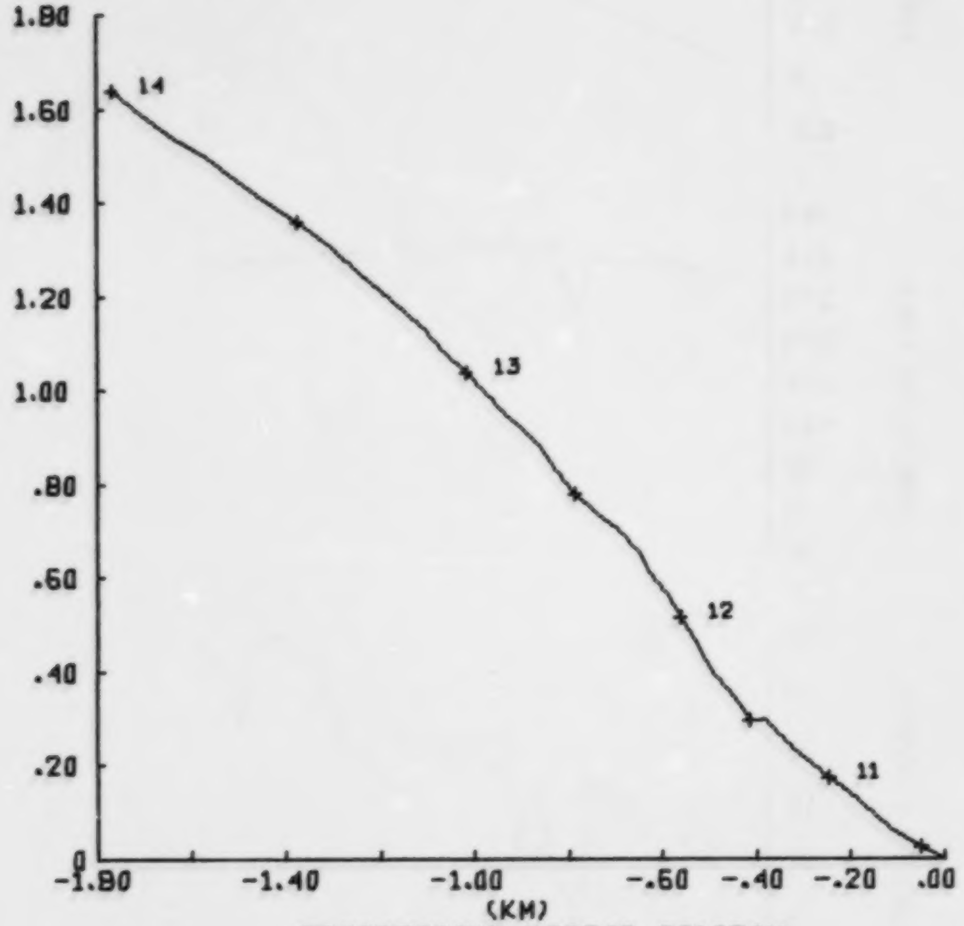
Plot of time series currents taken during the field experiment on 071575. Tides are those predicted at Sandy Hook, N. J.



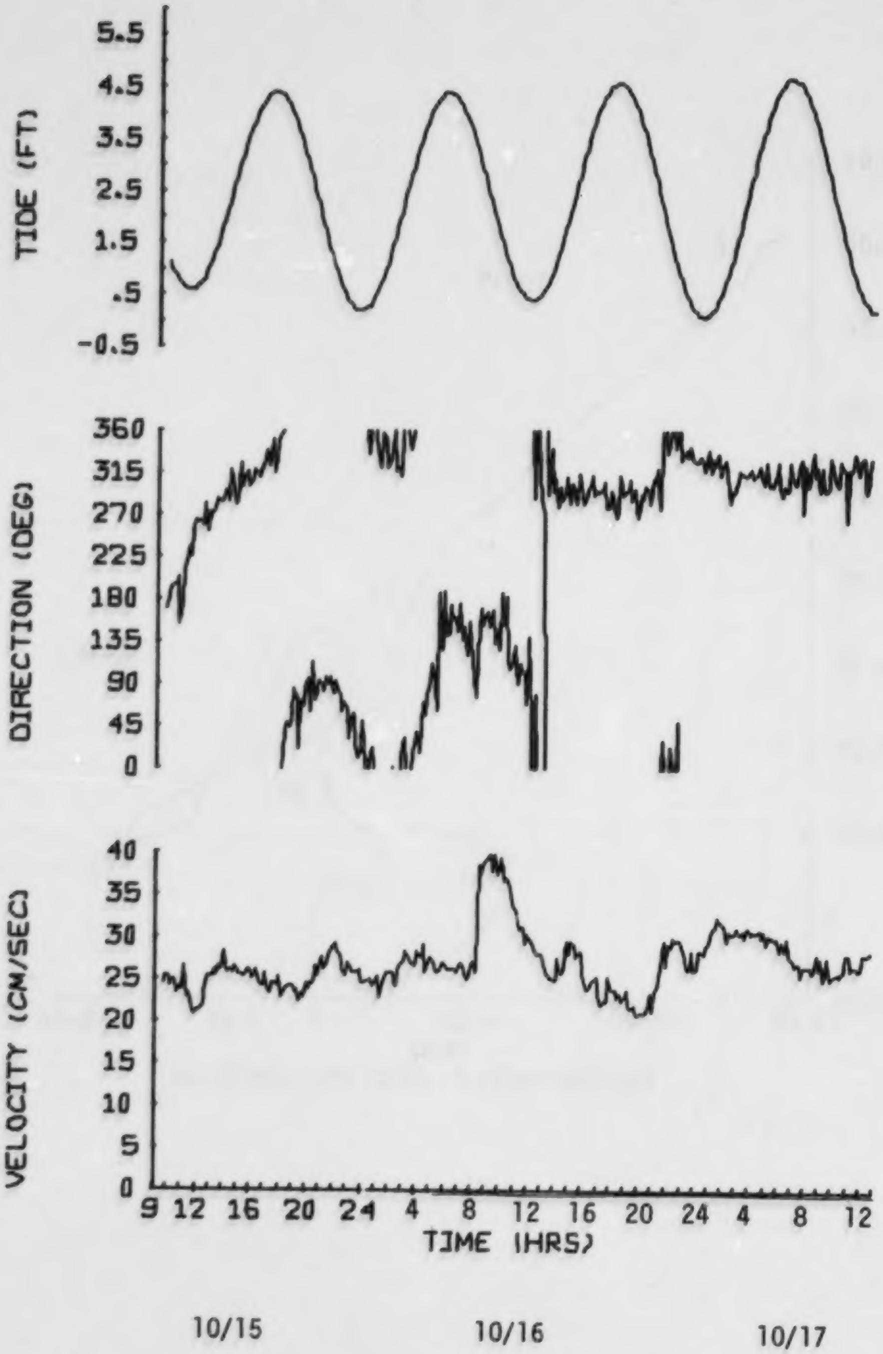
Progressive vector plot made from measurements made during the field experiment on 071575. True north is toward the top of the plot.



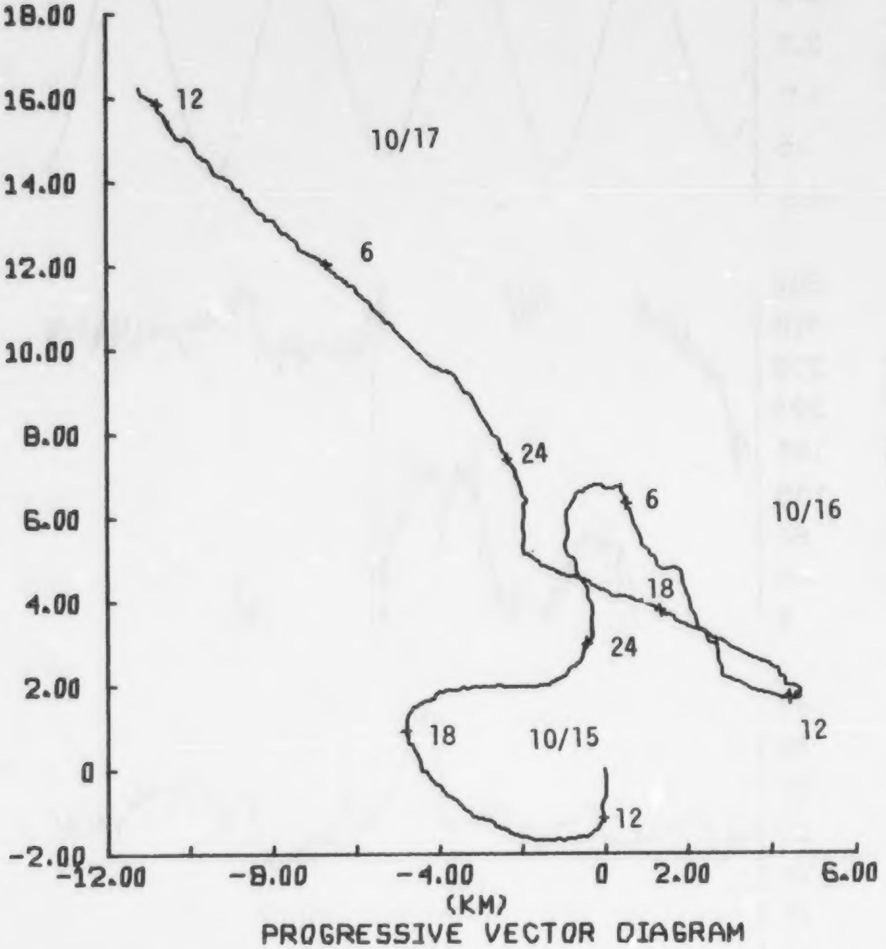
Plot of time series currents taken during the field experiment on 071675. Tides are those predicted at Sandy Hook, N. J.



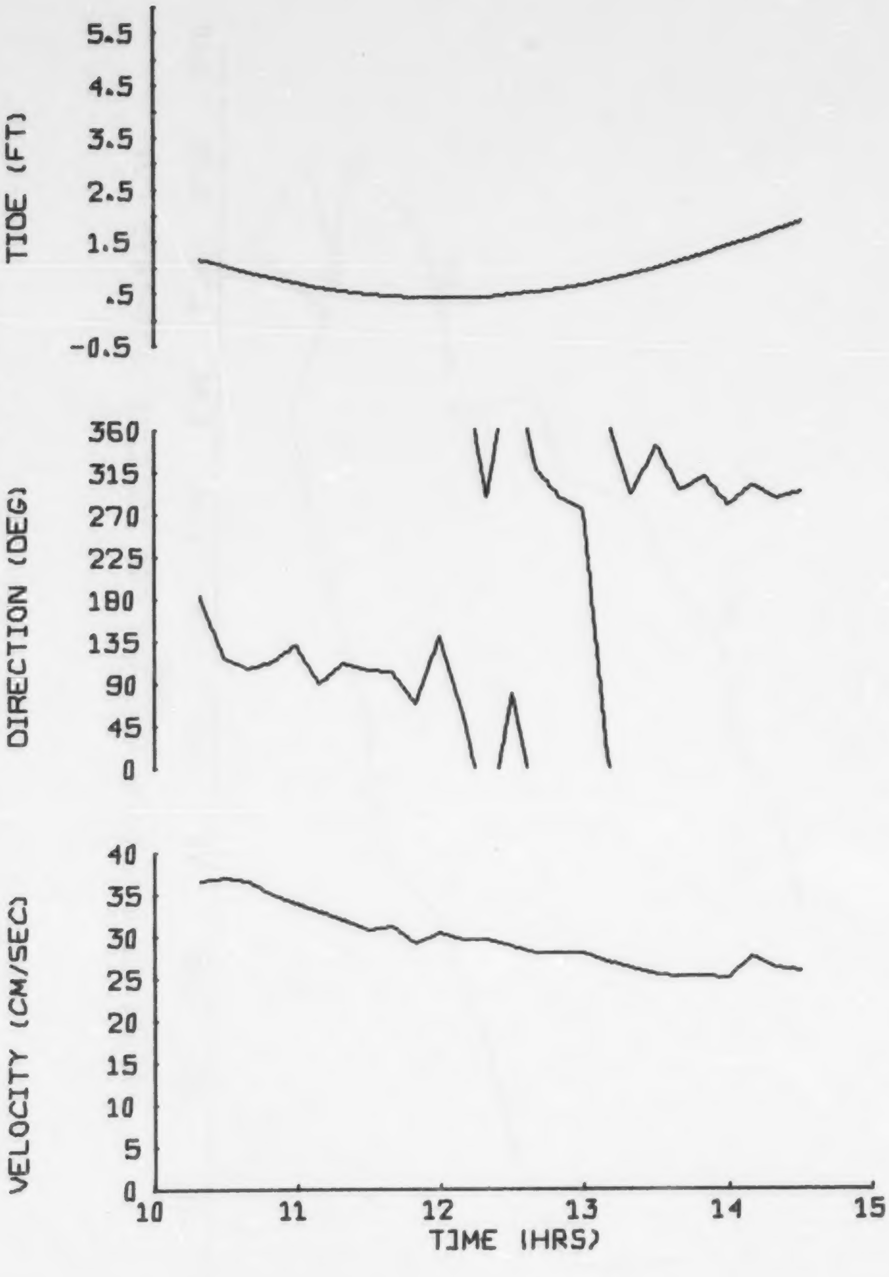
Progressive vector plot made from measurements made during the field experiment on 071675. True north is toward the top of the plot.



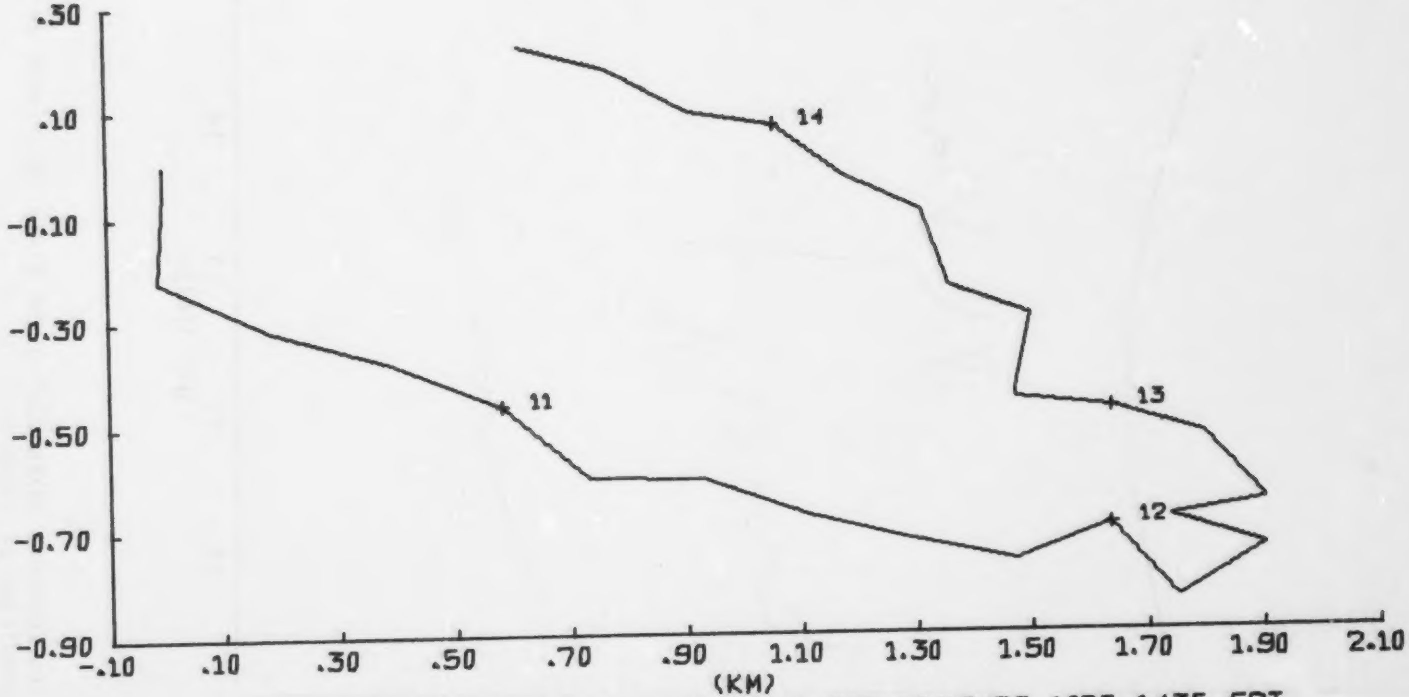
Plot of time series currents taken at the dumpsite between 101575 and 101775. Tides are those predicted at Sandy Hook, N. J.



Progressive vector plot made from measurements made between 101575 and 101775. True north is toward the top of the plot.



Plot of time series currents taken during the field experiment on 101675.
Tides are those predicted at Sandy Hook, N. J.



PROGRESSIVE VECTOR DIAGRAM FOR 10/16/75 1025-1435 EDT

Progressive vector plot made from measurements made during the field experiment on 101675. True north is toward the top of the plot.

APPENDIX E

Current Meter Profiles

CURRENT PROFILE: May 6, 1975

Station-Time	Depth, m.	Current Speed, cm sec^{-1}	Direction, ° true
050675-1 0915 HRS	2.5	12.5	156
	5.0	4.7	177
	7.5	4.7	177
	10.0	1.5	121
	12.5	1.9	351
	15.0	8.3	57
	17.5	11.3	32
	20.0	6.1	89
	22.5	8.5	10

CURRENT PROFILE: May 8, 1975

Station-Time	Depth, m.	Current Speed, cm sec^{-1}	Direction, ° true
050875-1 1127 HRS	2.5	8.8	187
	5.0	8.6	187
	7.5	9.8	167
	10.0	10.0	172
	12.5	10.3	164
	15.0	10.6	165
	17.5	10.5	160
	20.0	11.3	151
050875-3 1342 HRS	2.5	13.0	020
	5.0	12.7	032
	7.5	11.5	031
	10.0	10.3	030
	12.5	11.5	023
	15.0	11.7	012
	17.5	12.9	004
	20.0	4.2	326
	22.0	4.7	339

CURRENT PROFILE: May 9, 1975

Station-Time	Depth, m.	Current Speed, cm sec^{-1}	Direction, ° true
050975-1 0948 HRS	2.5	10.8	205
	5.0	8.2	196
	7.5	7.8	150
	10.0	7.8	150
	12.5	7.8	150
	15.0	7.8	145
	17.5	10.4	150
	20.0	7.9	166
	22.0	5.3	146

CURRENT PROFILE: July 16, 1975

Station-Time	Depth, m.	Current Speed, cm sec^{-1}	Direction, ° true
071675-1	2.5	21.3	261
0944 HRS	5.0	18.5	256
	7.5	17.0	261
	10.0	15.8	260
	12.5	12.4	254
	15.0	12.0	260
	17.5	12.9	258
	20.0	11.4	256
	22.5	11.4	266

CURRENT PROFILE: July 18, 1975

Station-Time	Depth, m.	Current Speed, cm sec^{-1}	Direction, ¼ true
071875-1	2.5	11.1	047
0955 HRS	5.0	9.4	106
	7.5	16.2	144
	10.0	22.1	159
	12.5	24.6	167
	15.0	21.2	170
	17.5	19.8	165
	20.0	15.4	163
	22.5	16.6	154

CURRENT PROFILE: October 15, 1975

Station-Time	Depth, m.	Current Speed, cm sec^{-1}	Direction, ° true
101575-1 1303 HRS	0.5	31.5	024
	2.0	24.1	047
	4.0	6.7	038
	6.0	8.5	315
	8.0	7.7	317
	10.0	9.0	343
	12.0	11.8	344
	14.0	2.4	005
	16.0	6.7	153
	18.0	13.8	157
	20.0	10.2	169

APPENDIX F

Suspended Matter

SUSPENDED MATTER: May 9, 1975

Station-Time	Depth, m.	Temp., °C	Sal., °/oo	σ_t	% Tr	A, m^{-1}	Total Suspended Solids, mg l^{-1}
050975-1 0912 HRS	0.8	10.23	29.16	22.39	90	1.0	1.74
	4.8	9.71	32.00	24.68	93	0.7	0.97
	10.3	8.36	32.09	25.12	94	0.6	0.70
	15.3	8.03	32.33	25.19	93	0.8	1.25
	20.4	8.01	32.34	25.21	89	1.2	5.48
	23.2	8.01	32.31	25.18	77	2.6	10.54
050975-2 1103 HRS	1.3	10.44	30.90	23.71	82	2.0	5.08
	5.4	9.09	32.30	25.02	83	1.9	4.23
	10.5	8.35	32.31	25.13	95	0.5	0.88
	15.2	8.25	32.29	25.14	95	0.5	0.62
	20.5	8.03	32.31	25.18	93	0.8	2.23
050975-3 1121 HRS	1.0	10.23	30.99	23.81	94	0.6	0.96
	5.4	9.25	32.16	24.88	94	0.6	0.98
	10.5	8.37	32.31	25.13	95	0.5	0.67
	15.2	8.09	32.30	25.17	94	0.6	1.03
	20.2	8.03	32.32	25.19	91	0.9	2.74
050975-4 1222 HRS	0.9	11.23	30.11	22.96	75	2.9	6.40
	5.5	9.41	32.24	24.91	92	0.9	1.69
	10.5	8.33	32.33	25.15	92	0.9	1.72
	15.4	8.07	32.33	25.19	94	0.6	1.08
	20.5	8.03	32.32	25.19	90	1.1	3.49

SUSPENDED MATTER: July 15, 1975

Station-Time	Depth, m.	Temp., °C	Sal., °/oo	σ_t	% Tr	A, m^{-1}	Total Suspended Solids, mg l^{-1}
071575-2	0.5	21.20	29.50	20.30	0	69.1	345.7
1032 HRS	7.0	21.22	29.61	20.37	16	18.1	193
	11.1	18.53	31.63	22.59	94	0.7	0.97
	16.4	13.18	31.62	23.76	90	1.0	1.68
	23.2	13.10	31.62	23.78	82	2.0	4.00
071575-3	0.4	21.36	29.46	20.22	54	6.1	3.19
1144 HRS	7.5	20.22	30.69	21.45	94	0.7	0.87
	10.9	18.49	31.48	22.49	94	0.6	1.25
	17.3	13.21	31.65	23.78	90	1.1	2.59
071575-4	0.4	21.80	29.44	20.09	90	1.1	1.31
1406 HRS	7.2	21.56	29.45	20.16	89	1.1	1.23
	11.3	20.03	31.19	21.88	94	0.6	0.56
	18.3	13.25	31.65	23.77	91	1.0	1.6

SUSPENDED MATTER: July 16, 1975

Station-Time	Depth, m.	Temp., °C	Sal., °/oo	σ_t	% Tr	A, m^{-1}	Total Suspended Solids, mg l^{-1}
071675-1 0917 HRS	0.2	21.74	30.12	20.62	89	1.1	1.76
	5.6	21.05	30.48	21.08	93	0.8	0.87
	11.0	17.54	30.86	22.24	93	0.7	1.10
	15.6	13.33	31.70	23.79	91	0.9	1.25
	20.8	12.82	31.73	23.92	90	1.1	1.51
071675-2 1036 HRS	0	21.73	29.40	20.07	0	69.1	388.7
	5.7	20.94	30.52	21.13	91	0.9	1.55
	11.1	16.99	30.25	21.90	92	0.8	1.02
	16.4	13.30	31.67	23.78	90	1.1	1.08
	21.6	12.48	31.71	23.97	86	1.6	1.61
071675-3 1203 HRS	0	22.86	29.79	20.06	12	20.9	18.02
	5.5	21.16	30.53	21.08	91	0.9	0.78
	9.8	18.94	31.31	22.25	93	0.8	0.90
	14.7	17.44	31.70	22.91	92	0.8	0.96
	17.7	13.17	31.73	23.86	91	0.9	1.15

SUSPENDED MATTER: July 18, 1975

Station-Time	Depth, m.	Temp., °C	Sal., ‰	σ_t	% Tr	A, m^{-1}	Total Suspended Solids, mg l^{-1}
071875-1	0.2	21.41	30.71	21.15	89	1.2	1.12
0902 HRS	5.2	20.99	30.85	21.37	90	1.1	1.14
	9.6	17.77	32.14	23.16	93	0.8	0.81
	14.3	13.50	31.82	23.86	91	1.0	1.41
	19.6	13.41	31.70	23.78	90	1.0	2.66
071875-2	0.4	21.53	30.54	20.99	9	25.3	69.79
1038 HRS	5.3	20.96	30.82	21.35	86	1.5	1.71
	10.7	17.84	32.08	23.10	92	0.9	0.84
	15.4	15.43	31.84	23.47	91	0.9	1.15
	19.8	13.34	31.82	23.88	86	1.5	2.69
071875-3	0.3	21.69	30.62	21.01	63	4.7	7.84
1156 HRS	5.6	21.09	30.78	21.29	82	2.0	2.29
	10.7	18.05	32.08	23.05	92	0.9	0.81
	15.9	15.48	32.83	24.21	91	1.0	0.78
	20.9	13.09	31.75	23.88	89	1.1	2.19

SUSPENDED MATTER: July 19, 1975

Station-Time	Depth, m.	Temp., °C	Sal., °/oo	σ_t	% Tr	A, m^{-1}	Total Suspended Solids, mg l^{-1}
071975-1	0.8	22.30	28.08	18.92	82	2.0	2.15
0924 HRS	5.6	18.88	31.29	22.24	90	1.1	1.28
	10.8	15.00	31.53	23.33	90	1.0	1.30
	15.5	11.74	31.93	24.28	90	1.0	2.41
	22.5	11.62	31.90	24.27	91	1.0	1.85
071975-2	0.3	22.30	28.12	18.95	2	39.6	106.5
1041 HRS	6.2	18.42	31.32	22.38	90	1.0	1.7
	12.0	13.70	31.47	23.54	91	0.9	1.41
	20.0	10.84	31.91	24.42	92	0.9	1.21

SUSPENDED MATTER: October 14, 1975

Station-Time	Depth, m.	Temp., °C	Sal., °/oo	σ_t	% Tr	A, m^{-1}	Total Suspended Solids, mg l^{-1}
101475-1 0918 HRS	0.4	16.57	29.84	21.68	99	0.1	0.52
	5.9	16.64	30.19	21.93	99	0.2	0.58
	10.9	16.69	30.33	22.04	98	0.2	0.49
	15.8	16.81	30.54	22.17	99	0.1	0.50
	20.9	16.92	31.73	23.05	98	0.2	0.55
101475-2 1023 HRS	0.5	16.67	29.56	21.45	8	25.3	100.1
	5.5	16.70	30.31	22.02	90	1.0	6.74
	11.1	16.71	30.39	22.07	96	0.4	0.44
	16.0	17.04	31.47	22.82	98	0.2	0.47
	21.0	16.87	31.77	23.09	97	0.3	0.75
101475-3 1121 HRS	0.4	17.02	29.47	21.30	41	8.8	27.50
	1.0	17.14	29.31	21.15	32	11.4	25.27
101475-4 1252 HRS	0.2	17.23	29.44	21.23	71	3.5	5.82
	0.3	17.23	29.44	21.23	77	2.6	4.26

SUSPENDED MATTER: October 15, 1975

Station-Time	Depth, m.	Temp., °C	Sal., °/oo	σ_t	% Tr	A, m^{-1}	Total Suspended Solids, mg l^{-1}
101575-1	0	17.75	29.03	20.80	89	1.1	1.06
1330 HRS	5.9	16.87	30.25	21.93	93	0.7	0.43
	10.6	16.72	30.34	22.03	94	0.7	0.38
	15.4	16.90	30.96	22.46	93	0.7	0.42
	20.7	16.85	31.69	23.03	92	0.8	0.78

SUSPENDED MATTER: October 16, 1975

Station-Time	Depth, m.	Temp., °C	Sal., °/oo	σ_t	% Tr	A, m^{-1}	Total Suspended Solids, mg l^{-1}
101675-1 0912 HRS	0.5	17.03	28.58	20.62	90	1.1	1.15
	5.5	16.96	29.37	21.24	93	0.8	1.06
	8.9	16.92	29.94	21.69	94	0.6	0.54
	14.5	16.85	30.08	21.80	95	0.5	0.58
	19.1	16.93	31.10	22.57	96	0.4	0.44
101675-2 1051 HRS	0.9	17.01	29.50	21.33	25	14.1	44.69
	2.2	16.97	29.56	21.38	41	8.8	23.41
	4.5	17.00	29.54	21.36	25	13.9	40.54
	6.6	16.93	29.69	21.49	45	8.0	19.72
	10.9	16.84	30.00	21.75	95	0.6	0.58
	15.2	16.89	31.06	22.54	95	0.6	3.92
	21.4	16.88	31.70	23.04	94	0.6	0.62
101675-3 1301 HRS	2.0	17.06	29.62	21.41	64	4.5	10.97
	4.3	17.04	29.65	21.43	72	3.3	8.02
	8.3	16.88	29.84	21.61	91	1.0	2.60

SUSPENDED MATTER: October 17, 1975

Station-Time	Depth, m.	Temp., °C	Sal., °/oo	σ_t	% Tr	A, m^{-1}	Total Suspended Solids, mg l^{-1}
101775-1 0911 HRS	0.7	16.74	29.44	21.34	89	1.2	1.37
	5.5	16.76	29.44	21.34	89	1.2	1.23
	10.0	16.86	31.76	23.08	94	0.6	0.54
	15.2	16.72	31.90	23.23	94	0.6	0.53
	19.2	16.41	32.09	23.44	94	0.6	0.68
101775-2 1147 HRS	1.0	16.77	29.51	21.39	58	5.5	13.70
	1.7	16.77	29.53	21.40	65	4.3	8.47
	5.0	16.77	29.52	21.40	63	4.7	9.81
	10.0	16.89	31.75	23.07	93	0.8	0.65
	15.0	16.77	31.84	23.17	93	0.7	0.48
	20.5	16.33	31.98	23.38	93	0.7	0.74

APPENDIX G

Physical Characteristics of Sewage Sludge

Key to the codes used in the Settling Velocity Analysis is included on Table G-1.

TABLE G-1. PHYSICAL CHARACTERISTICS OF SEWAGE SLUDGE

Date Dumped	Vessel	Plant	Bulk* Density g cm^{-3}	% Solids (by wt.)	Dry Solids** Density g cm^{-3}	Solids** Conc., g l^{-1}	Light Extinction* A, m^{-1}	Settling Test Code
12/18/74	Newtown Creek	Bowery Bay	1.0095	2.2	1.75	22.2		
12/19/74	Newtown Creek	Bowery Bay	1.0106	2.5	1.72	25.4	0.49 TSM^{θ} - 0.21 (r = .9870)	
5/5/75	Owl's Head	Owl's Head	1.0181	4.9	1.56	50.2	0.55 TSM - 1.20 (r = .9953)	MS 1
5/8/75	North River	Newtown Creek	1.0095	2.7	1.53	27.5	0.27 TSM - 1.03 (r = .9951)	MS 3
5/9/75	North River	Newtown Creek	1.0062	2.2	1.38	22.3	0.55 TSM - 0.52 (r = .9970)	MS 4
7/15/75	Owl's Head	Coney Island	1.0168	4.4	1.60	44.7	0.51 TSM + 1.8 (r = .9971)	JS 1
7/16/75	Owl's Head	Owl's Head	1.0125	3.1	1.66	31.5	0.46 TSM + 0.01 (r = .9861)	JS 2
7/18/75	Owl's Head	Owl's Head	1.0101	3.3	1.43	33.3	0.44 TSM + 0.23 (r = .9994)	JS 3
7/19/75	Newtown Creek	Newtown Creek	1.0055	2.8	1.25	27.7	0.41 TSM + 0.51 (r = .9959)	JS 4
10/14/75	Owl's Head	Owl's Head	1.0085	2.3	1.59	22.9		OS 1
10/15/75	Newtown Creek	Ward's Island	1.0007	0.7	1.12	6.7		OS 2
10/16/75	North River	Newtown Creek	1.0070	2.4	1.40	24.3	0.44 TSM - 0.61 (r = .9934)	OS 3
10/17/75	Newtown Creek	Hunt's Point	1.0019	0.5	1.57	5.2		OS 4

* See Browne and Callaway (1975) for procedures. Correlation coefficient, r, is noted in parentheses.

** Computed.

θ Total Suspended Matter, mg l^{-1}.

```
                    SETTLING VELOCITY ANALYSIS

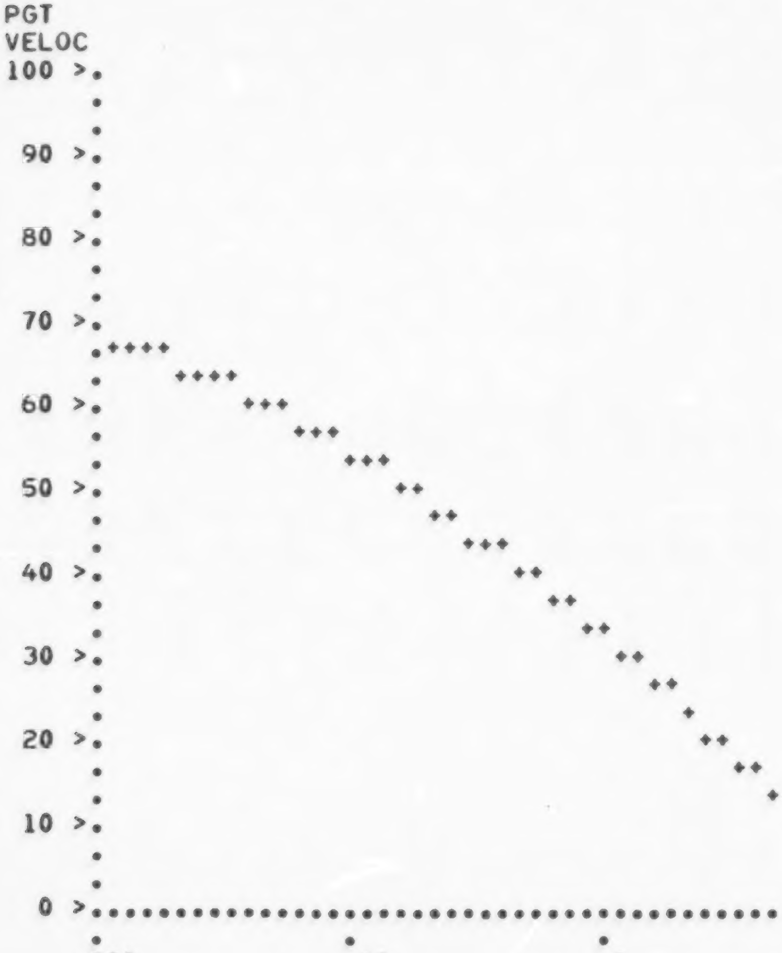
MS1  OWLS HEAD PLANT
TEST CODE: ST9     INIT. CONC.=509 MG/L

SETTLING VELOC. DISTRIBUTION EQUATION
     PGT =  -20.4696 +     16.9325 LNT +  -0.7559 LNTSQ

REGRESSION ANALYSIS DATA
     CORRELATION COEF. = .9987
     STANDARD ERROR =       .81

SELECTED VALUES
 %TILE          VELOC
     25         .1840
     40         .0482
     50         .0166
     60         .0044
     75

SETTLING VELOCITY DISTRIBUTION
```



SETTLING VELOCITY(CM/SEC)
LOG SCALE

```
                SETTLING VELOCITY ANALYSIS

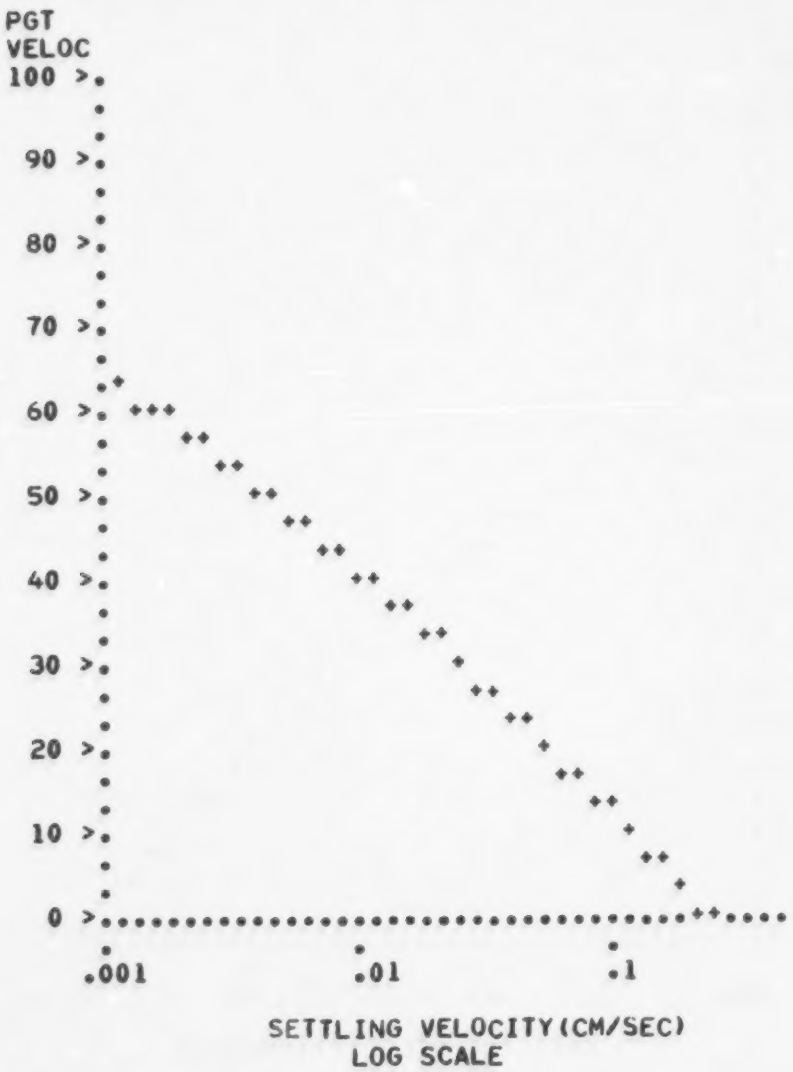
MS3  NEWTOWN CREEK PLANT
TEST CODE:ST10  H=50 CM  INIT. CONC.=171 MG/L

SETTLING VELOC. DISTRIBUTION EQUATION
     PGT =  -19.9212 +   -16.0107 LNT +  -0.5163 LNTSQ

REGRESSION ANALYSIS DATA
     CORRELATION COEF. = .9890
     STANDARD ERROR =     3.16

SELECTED VALUES
 %TILE         VELOC
     25        .0368
     40        .0107
     50        .0043
     60        .0016
     75        .0003

SETTLING VELOCITY DISTRIBUTION
```



```
                    SETTLING VELOCITY ANALYSIS

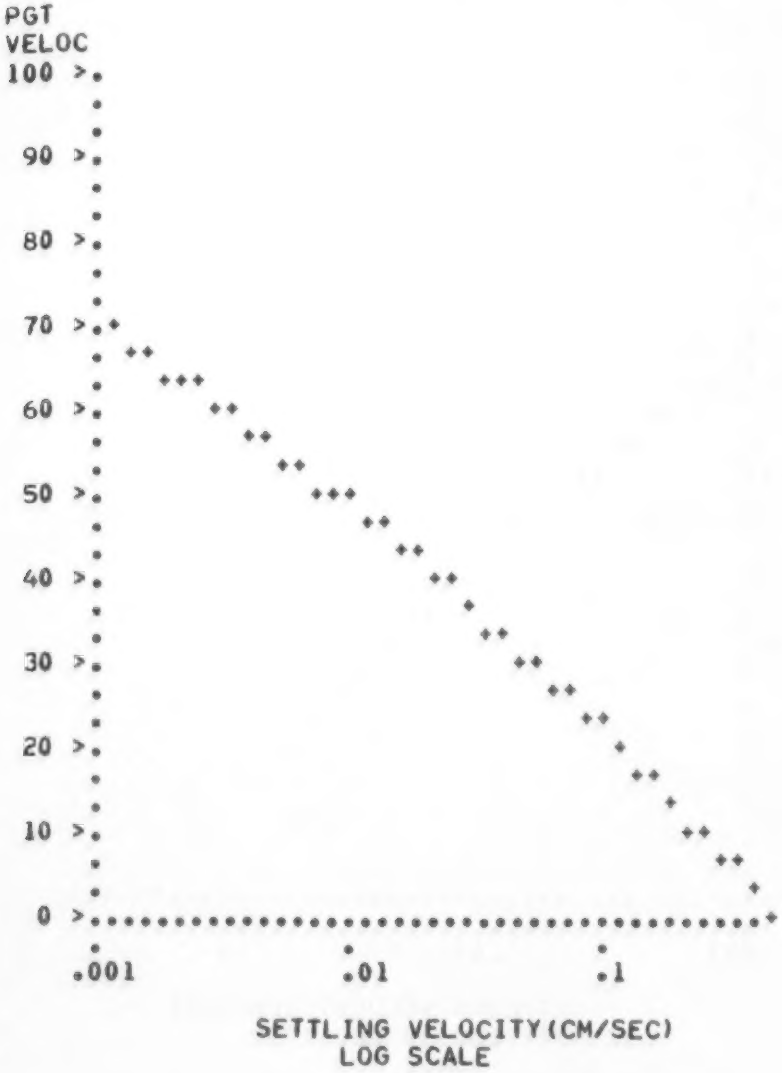
MS3  NEWTOWN CREEK PLANT
TEST CODE: ST10  H=100 CM  INIT. CONC.=171 MG/L

SETTLING VELOC. DISTRIBUTION EQUATION
     PGT =  -18.1315 +    15.5035 LNT +  -0.4873 LNTSQ

REGRESSION ANALYSIS DATA
     CORRELATION COEF. = .9920
     STANDARD ERROR =     2.81

SELECTED VALUES
 %TILE          VELOC
     25          .0766
     40          .0217
     50          .0086
     60          .0031
     75          .0005

SETTLING VELOCITY DISTRIBUTION
```



SETTLING VELOCITY ANALYSIS

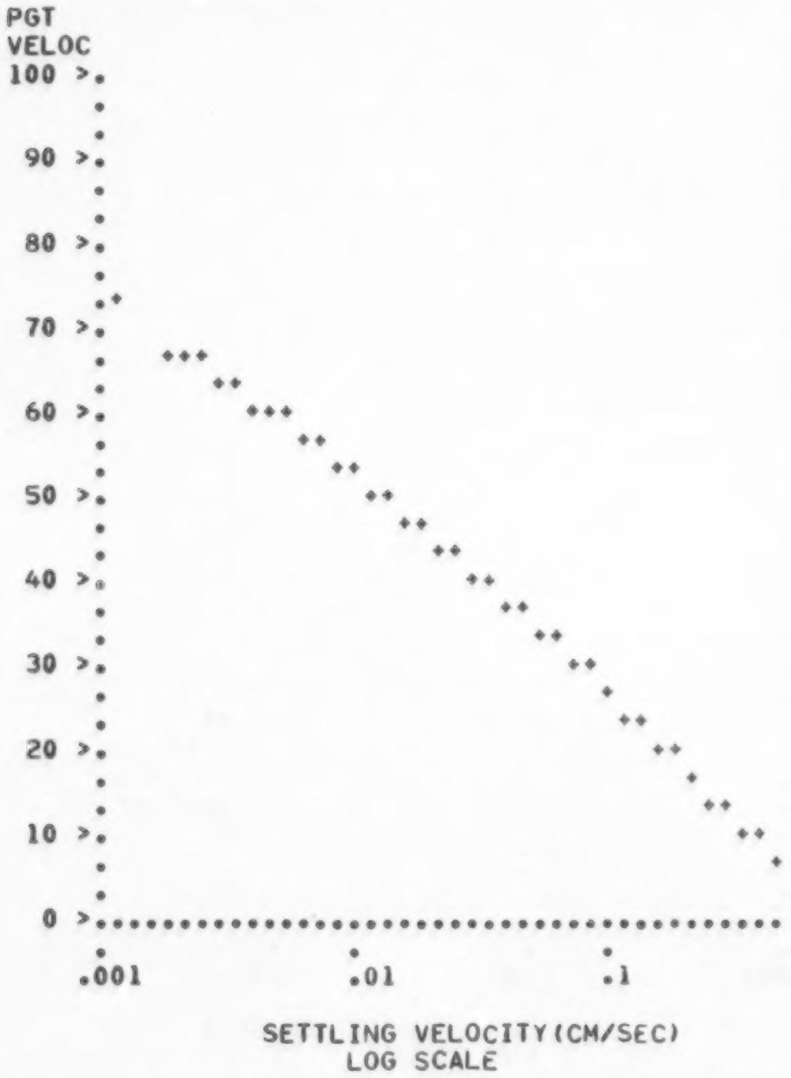
```
MS3  NEWTOWN CREEK PLANT
TEST CODE:ST10  H=150 CM   INIT CONC=171 MG/L

SETTLING VELOC. DISTRIBUTION EQUATION
     PGT =  -18.1192 +     15.4393 LNT +  -0.4840 LNTSQ

REGRESSION ANALYSIS DATA
     CORRELATION COEF. = .9954
     STANDARD ERROR =     2.14

SELECTED VALUES
 %TILE          VELOC
     25          .1135
     40          .0319
     50          .0126
     60          .0046
     75          .0008
```

SETTLING VELOCITY DISTRIBUTION



```
                SETTLING VELOCITY ANALYSIS

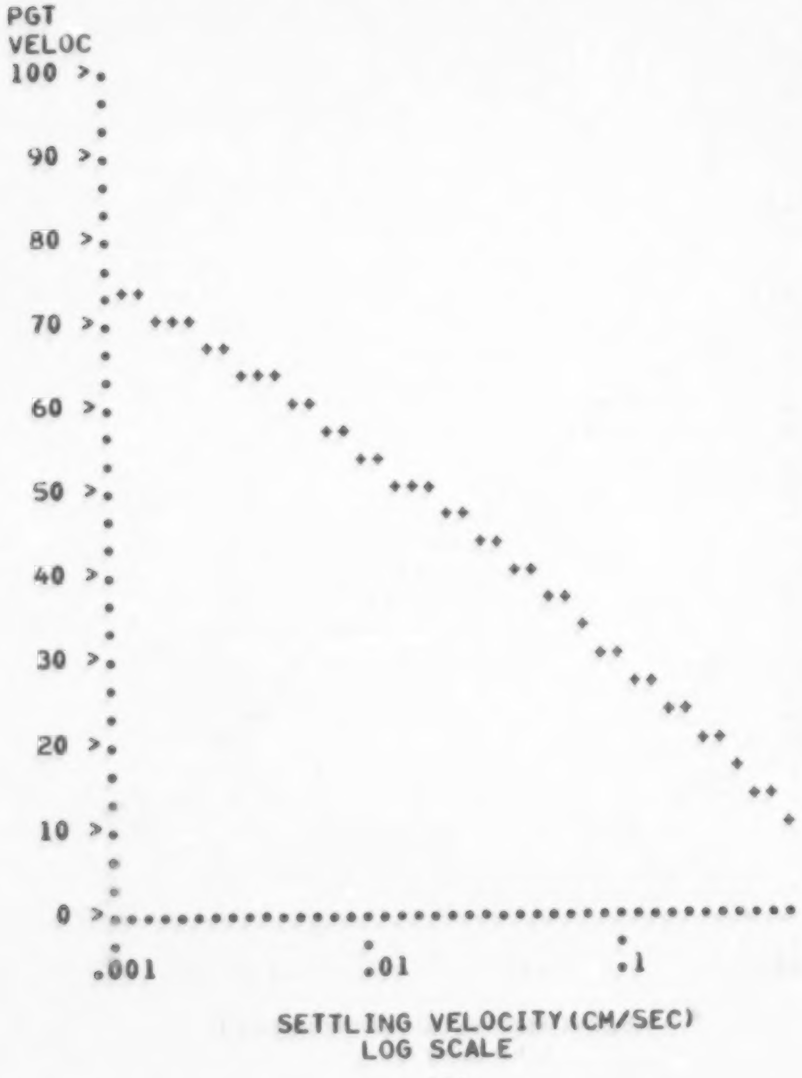
MS3  NEWTOWN CREEK PLANT
TEST CODE: ST10  H=200 CM  INIT. CONC.=171 MG/L

SETTLING VELOC. DISTRIBUTION EQUATION
     PGT =  -17.4218 +    14.9921 LNT +  -0.4449 LNTSQ

REGRESSION ANALYSIS DATA
     CORRELATION COEF. = .9949
     STANDARD ERROR =     2.25

SELECTED VALUES
 %TILE         VELOC
     25         .1475
     40         .0407
     50         .0159
     60         .0057
     75         .0010

SETTLING VELOCITY DISTRIBUTION
```



```
                    SETTLING VELOCITY ANALYSIS

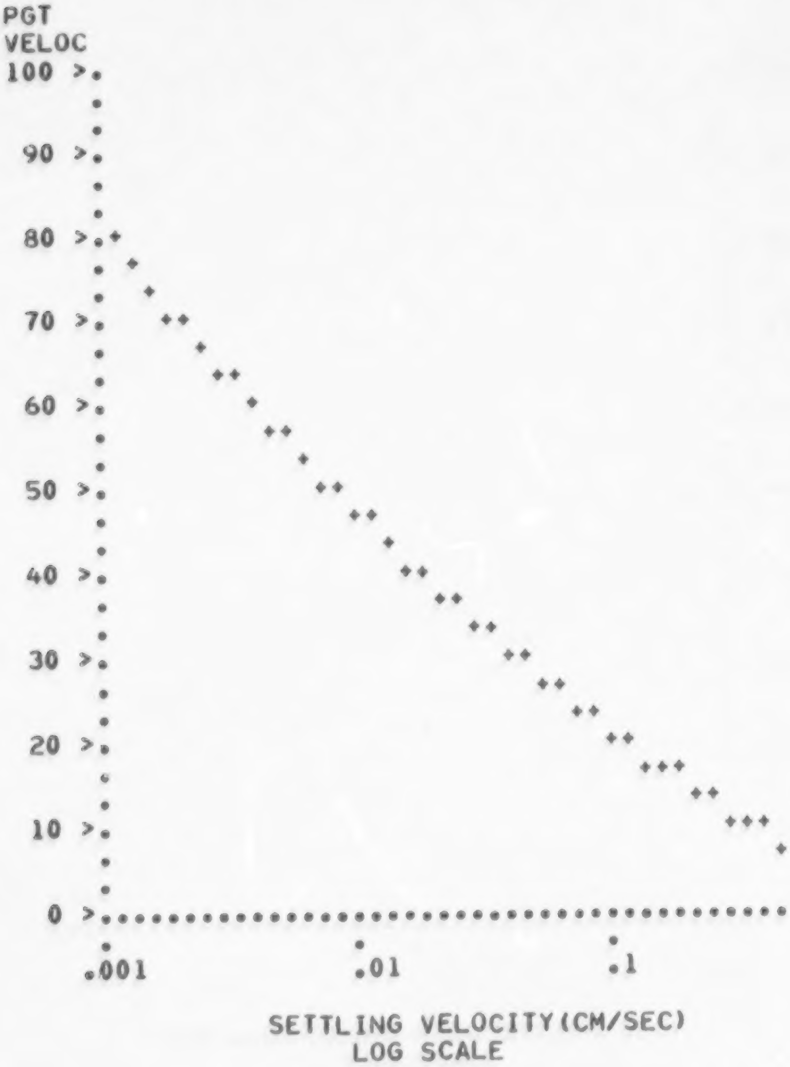
MS4  NEWTOWN CREEK PLANT
TEST CODE:ST15     INIT. CONC.=170 MG/L

SETTLING VELOC. DISTRIBUTION EQUATION
     PGT =    -5.7414 +      4.3976 LNT +     .7229 LNTSQ

REGRESSION ANALYSIS DATA
     CORRELATION COEF. = .9745
     STANDARD ERROR =      5.65

SELECTED VALUES
 %TILE          VELOC
    25          .0654
    40          .0175
    50          .0080
    60          .0039
    75          .0015

SETTLING VELOCITY DISTRIBUTION
```



```
              SETTLING VELOCITY ANALYSIS

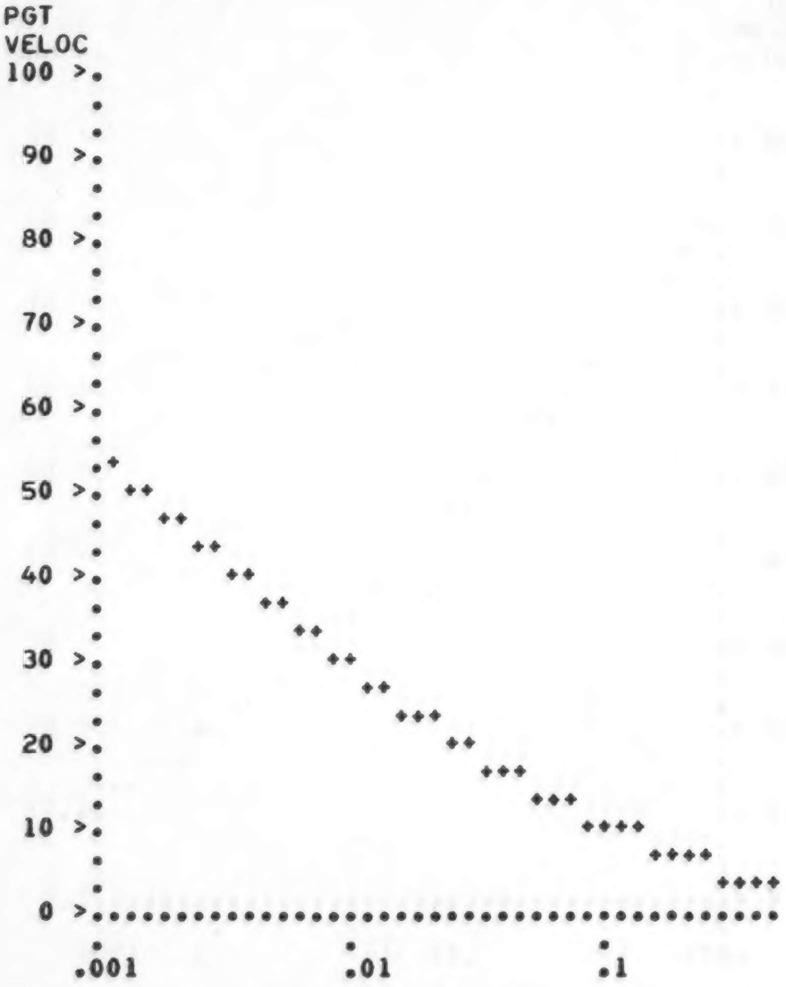
JS1  CONEY IS. PLANT
TEST CODE: ST19    INIT. CONC.=47 MG/L

SETTLING VELOC. DISTRIBUTION EQUATION
     PGT =    -2.3051 +      .4508 LNT +     .7785 LNTSQ

REGRESSION ANALYSIS DATA
     CORRELATION COEF. = .9690
     STANDARD ERROR =     4.71

SELECTED VALUES
 %TILE         VELOC
     25         .0148
     40         .0035
     50         .0015
     60         .0007
     75

SETTLING VELOCITY DISTRIBUTION
```



SETTLING VELOCITY(CM/SEC)
LOG SCALE

```
                    SETTLING VELOCITY ANALYSIS

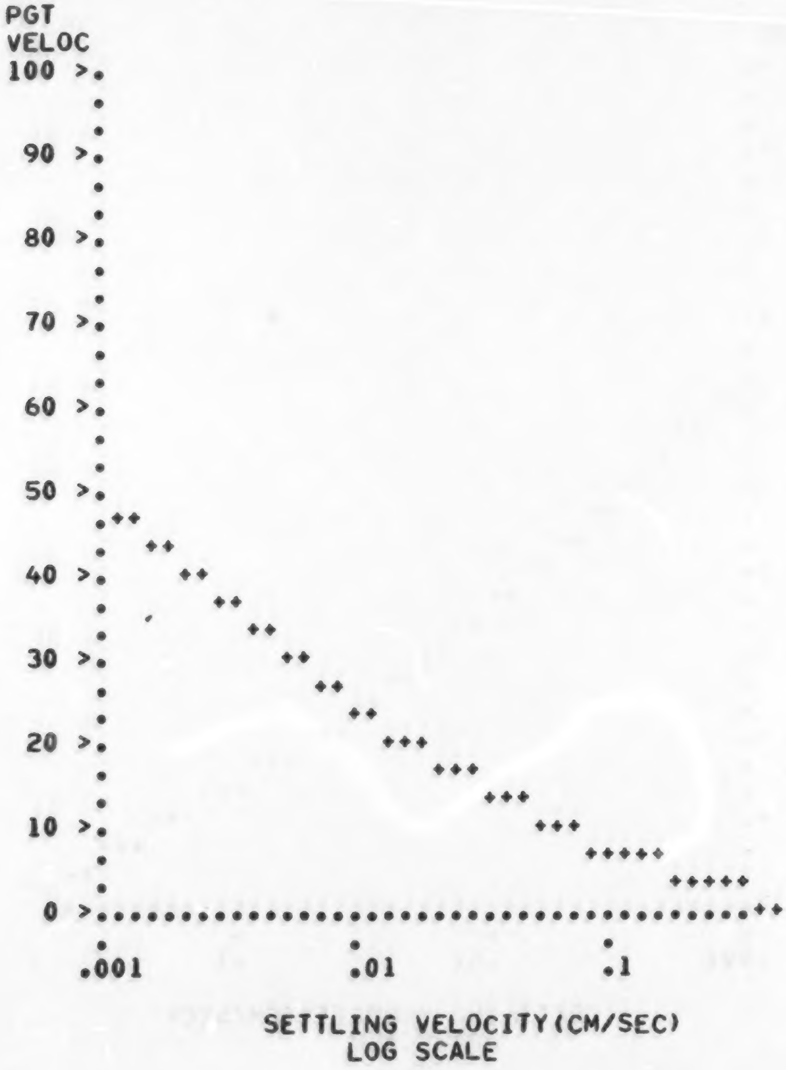
JS1  CONEY IS. PLANT
TEST CODE: ST20    INIT. CONC.=73 MG/L

SETTLING VELOC. DISTRIBUTION EQUATION
     PGT =    -0.9622 +    -0.9411 LNT +     .8458 LNTSQ

REGRESSION ANALYSIS DATA
     CORRELATION COEF. = .9858
     STANDARD ERROR =     2.99

SELECTED VALUES
 %TILE          VELOC
     25         .0091
     40         .0022
     50         .0010
     60         .0005
     75

SETTLING VELOCITY DISTRIBUTION
```



```
                  SETTLING VELOCITY ANALYSIS

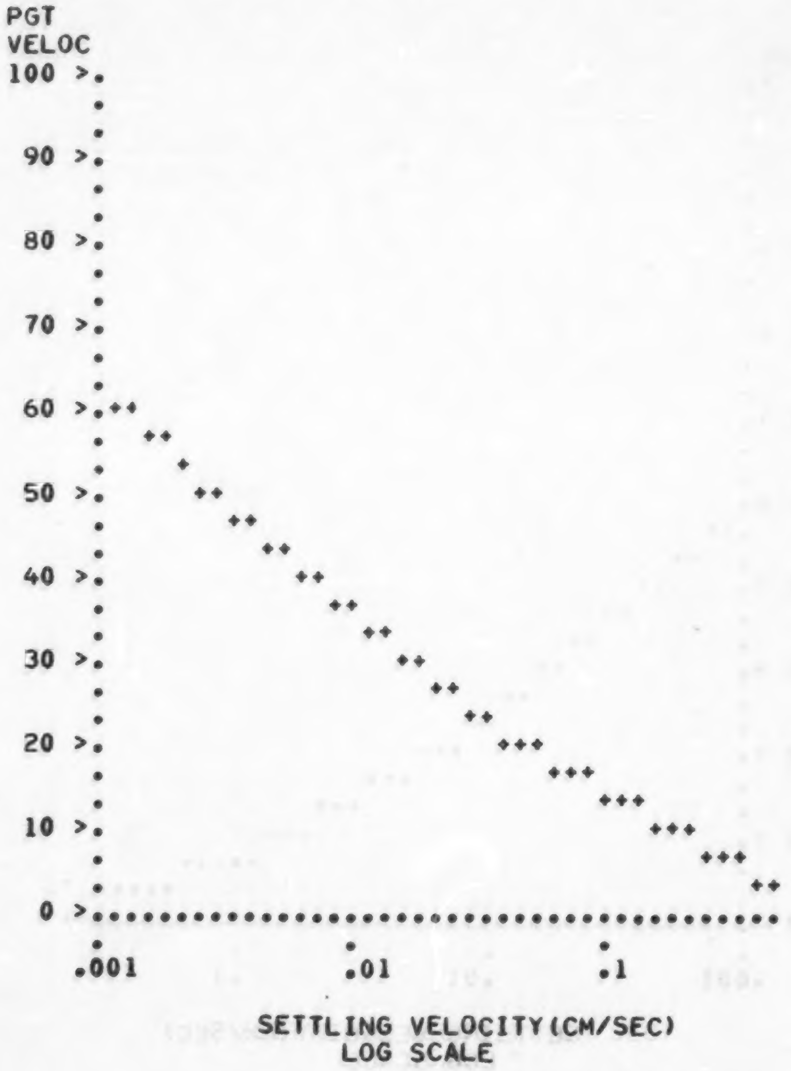
     JS1  CONEY IS. SLUDGE
     TEST CODE: ST16     INIT. CONC.=94 MG/L

    SETTLING VELOC. DISTRIBUTION EQUATION
       PGT =    -4.7924 +     2.4375 LNT +    .6919 LNTSQ

    REGRESSION ANALYSIS DATA
       CORRELATION COEF. = .9653
       STANDARD ERROR =    4.80

    SELECTED VALUES
     %TILE       VELOC
        25        .0272
        40        .0064
        50        .0028
        60        .0013
        75        .0005

    SETTLING VELOCITY DISTRIBUTION
```



```
                 SETTLING VELOCITY ANALYSIS

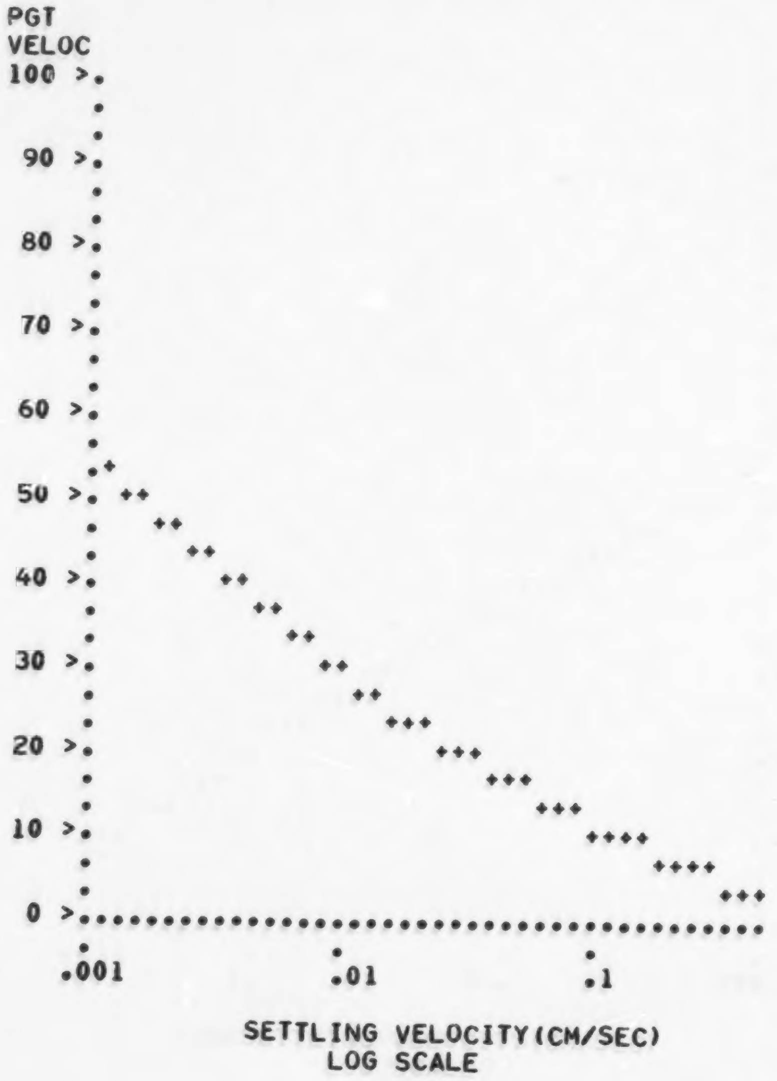
JS1  CONEY IS. PLANT
TEST CODE: ST18     INIT. CONC.=166 MG/L

SETTLING VELOC. DISTRIBUTION EQUATION
     PGT =    -2.8973 +     1.1952 LNT +     .6827 LNTSQ

REGRESSION ANALYSIS DATA
     CORRELATION COEF. = .9918
     STANDARD ERROR =     2.77

SELECTED VALUES
 %TILE          VELOC
     25         .0158
     40         .0034
     50         .0014
     60         .0007
     75

SETTLING VELOCITY DISTRIBUTION
```



```
                SETTLING VELOCITY ANALYSIS

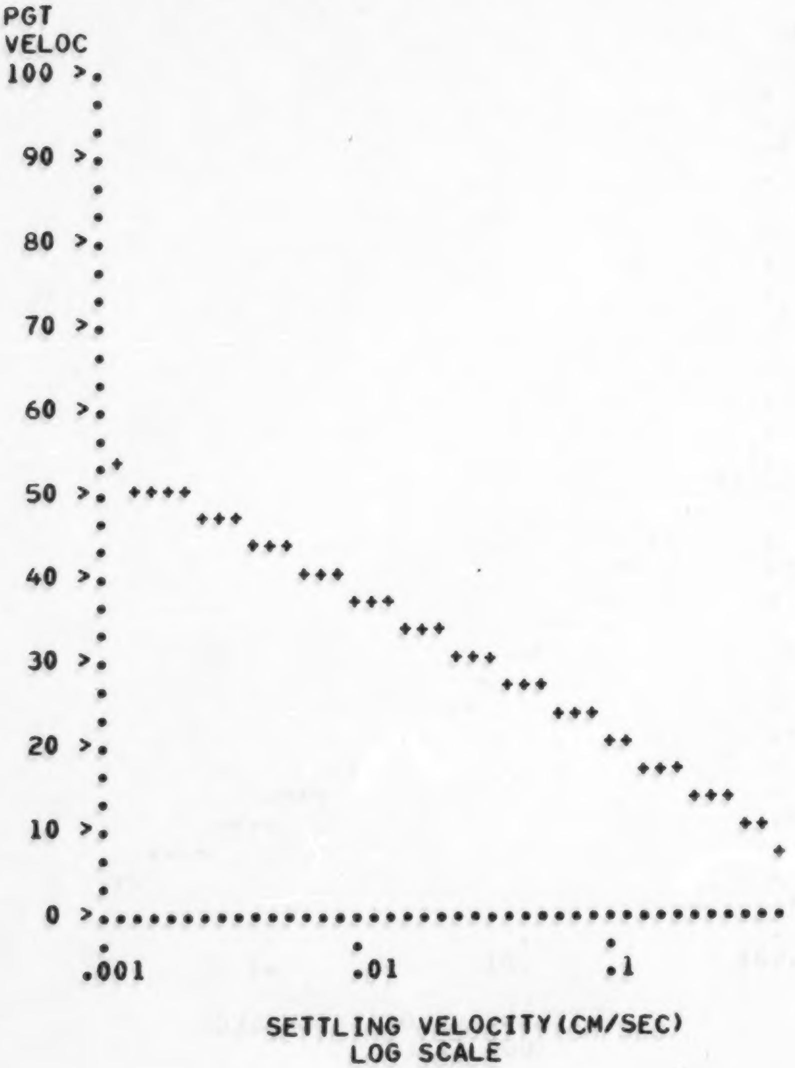
JS1  CONEY IS SLUDGE
TEST CODE: ST17    INIT. CONC.=320 MG/L

SETTLING VELOC. DISTRIBUTION EQUATION
    PGT =  -11.6235 +     9.3453 LNT +  -0.1839 LNTSQ

REGRESSION ANALYSIS DATA
    CORRELATION COEF. = .9980
    STANDARD ERROR =      .99

SELECTED VALUES
 %TILE          VELOC
    25          .0577
    40          .0076
    50          .0017
    60          .0003
    75              0

SETTLING VELOCITY DISTRIBUTION
```



```
                 SETTLING VELOCITY ANALYSIS

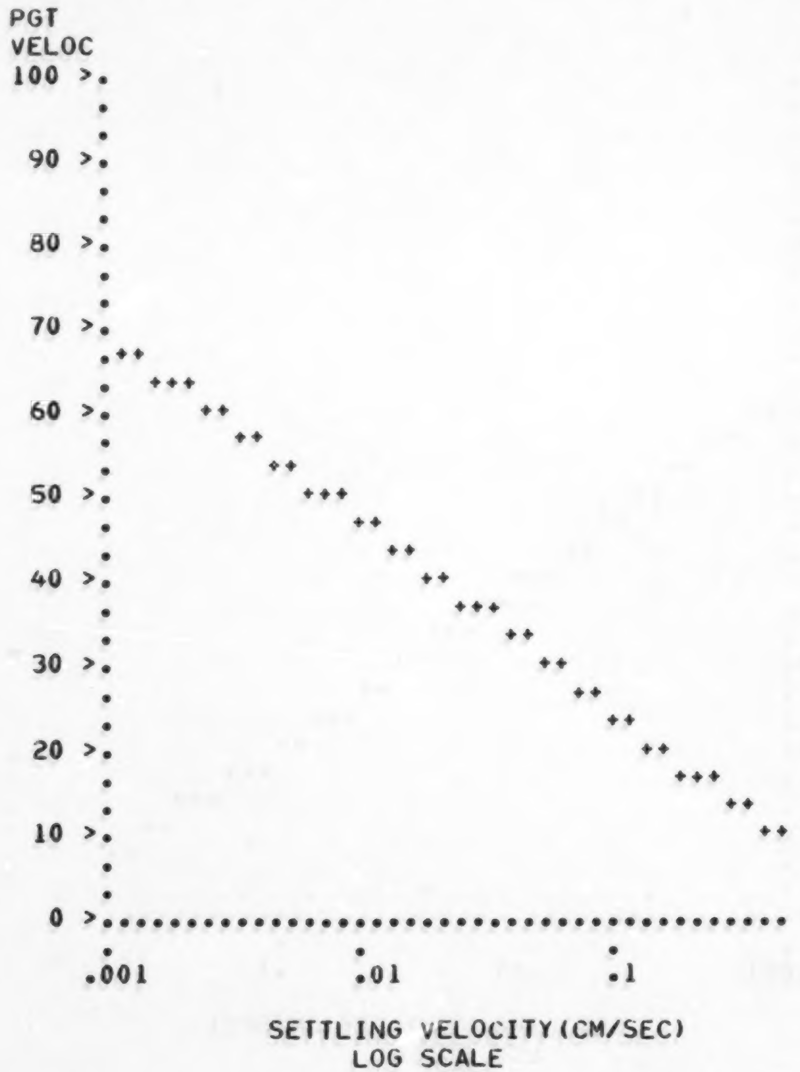
JS1  CONEY IS. PLANT
TEST CODE:ST21     INIT. CONC.=552 MG/L

SETTLING VELOC. DISTRIBUTION EQUATION
     PGT =  -13.4974 +   10.3515 LNT +   -0.0496 LNTSQ

REGRESSION ANALYSIS DATA
     CORRELATION COEF. = .9850
     STANDARD ERROR =     2.86

SELECTED VALUES
 %TILE         VELOC
     25          .0944
     40          .0207
     50          .0075
     60          .0027
     75          .0006

SETTLING VELOCITY DISTRIBUTION
```



```
                SETTLING VELOCITY ANALYSIS

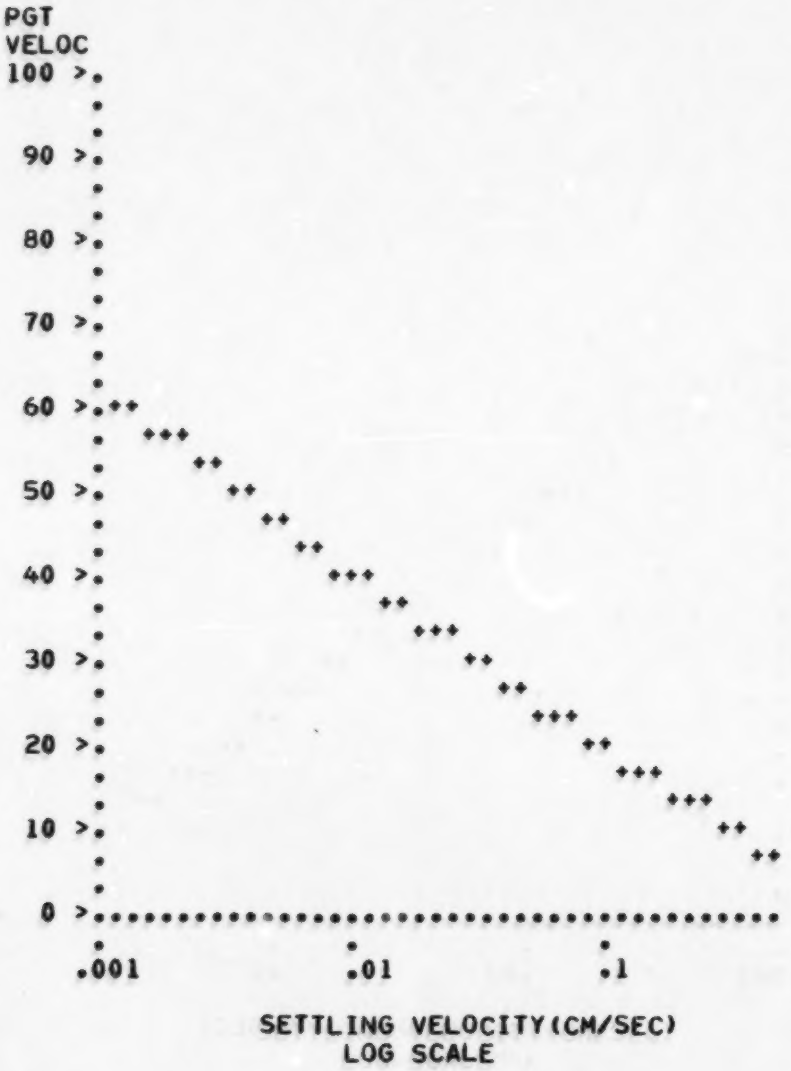
 JS1  CONEY IS SLUDGE
 TEST CODE: ST11    INIT. CONC.=172.7 MG/L

SETTLING VELOC. DISTRIBUTION EQUATION
    PGT =   -9.5391 +     7.0787 LNT +     .1925 LNTSQ

REGRESSION ANALYSIS DATA
    CORRELATION COEF. = .9981
    STANDARD ERROR =       1.18

SELECTED VALUES
 %TILE          VELOC
    25          .0531
    40          .0102
    50          .0036
    60          .0013
    75          .0003

SETTLING VELOCITY DISTRIBUTION
```



```
               SETTLING VELOCITY ANALYSIS

JS1  CONEY IS. PLANT
TEST CODE  ST11  H=50 CM        INIT. CONC.=173 MG/

SETTLING VELOC. DISTRIBUTION EQUATION
     PGT =  -15.0373 +    11.4391 LNT +  -0.2829 LNTSQ

REGRESSION ANALYSIS DATA
     CORRELATION COEF. = .9959
     STANDARD ERROR =     1.22

SELECTED VALUES
 %TILE         VELOC
     25        .0174
     40        .0031
     50        .0009
     60        .0002
     75        .0000

SETTLING VELOCITY DISTRIBUTION

PGT
VELOC
100 >.
     .
     .
 90 >.
     .
     .
 80 >.
     .
     .
 70 >.
     .
     .
 60 >.
     .
     .
 50 >.
     .+++
     .   +++
 40 >.      ++
     .        +++
     .           ++
 30 >.             +++
     .                ++
     .                  ++
 20 >.                    +++
     .                       ++
     .                         ++
 10 >.                           ++
     .                             ++
     .                               ++
  0 >..................................+++....
     .              .              .
    .001           .01            .1

               SETTLING VELOCITY(CM/SEC)
                   LOG SCALE
               SETTLING VELOCITY ANALYSIS

JS1  CONEY IS. PLANT
TEST CODE  ST11    H=100 CM    INIT CONC=173 MG/L

SETTLING VELOC. DISTRIBUTION EQUATION
     PGT =  -13.9993 +    10.2920 LNT +  -0.1388 LNTSQ

REGRESSION ANALYSIS DATA
     CORRELATION COEF. = .9994
     STANDARD ERROR =      .51

SELECTED VALUES
 %TILE         VELOC
     25        .0304
     40        .0057
     50        .0018
     60        .0005
     75            0

SETTLING VELOCITY DISTRIBUTION

PGT
VELOC
100 >.
     .
     .
 90 >.
     .
     .
 80 >.
     .
     .
 70 >.
     .
     .
 60 >.
     .
     .++
 50 >.  ++
     .    +++
     .       +++
 40 >.          ++
     .            +++
     .               ++
 30 >.                 ++
     .                   +++
     .                      ++
 20 >.                        ++
     .                          +++
     .                             ++
 10 >.                               ++
     .                                 +++
     .                                    ++
  0 >.......................................++
     .              .              .
    .001           .01            .1

               SETTLING VELOCITY(CM/SEC)
                    LOG SCALE
```

```
                 SETTLING VELOCITY ANALYSIS

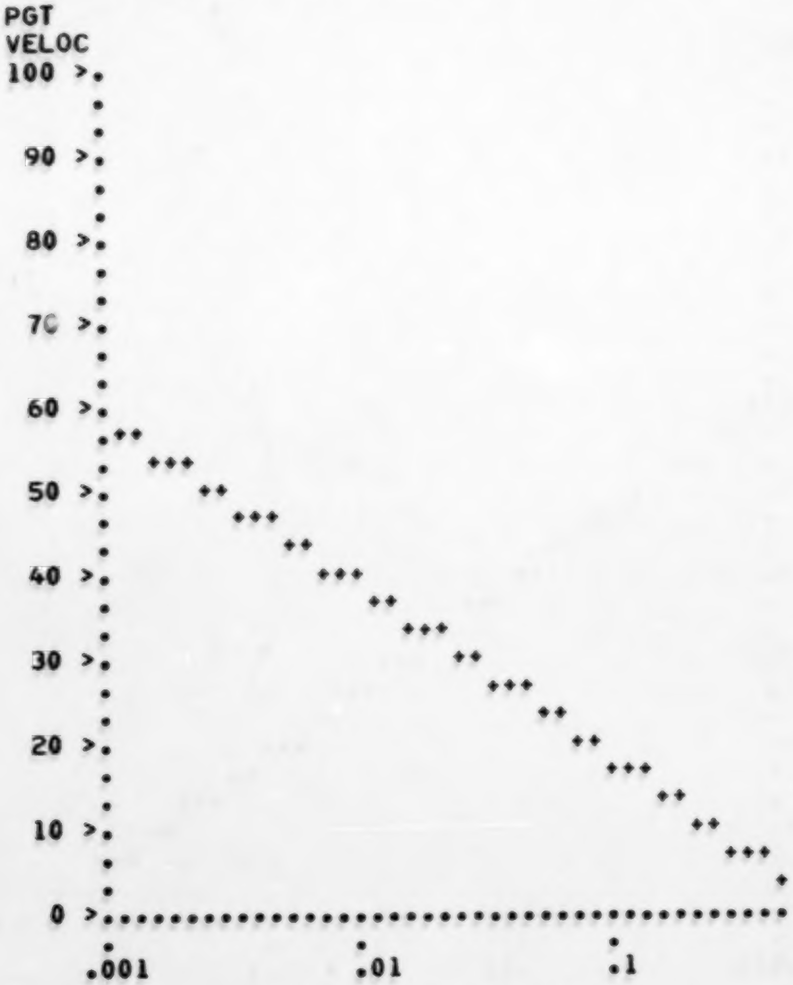
JS1  CONEY IS. PLANT
TEST CODE  ST11    H=150 CM     INIT CONC=173 MG/L

SETTLING VELOC. DISTRIBUTION EQUATION
     PGT =  -12.6107 +     9.8457 LNT +  -0.1037 LNTSQ

REGRESSION ANALYSIS DATA
     CORRELATION COEF. = .9983
     STANDARD ERROR =       .97

SELECTED VALUES
 %TILE          VELOC
     25          .0464
     40          .0085
     50          .0026
     60          .0008
     75              0
```

SETTLING VELOCITY DISTRIBUTION



SETTLING VELOCITY(CM/SEC)
LOG SCALE

```
               SETTLING VELOCITY ANALYSIS

JS1  CONEY IS. PLANT
TEST CODE  ST11    H=200 CM    INIT CONC=173 MG/L

SETTLING VELOC. DISTRIBUTION EQUATION
     PGT =  -11.8720 +     8.6537 LNT +     .0321 LNTSQ

REGRESSION ANALYSIS DATA
     CORRELATION COEF. = .9990
     STANDARD ERROR =      .80

SELECTED VALUES
 %TILE         VELOC
     25        .0502
     40        .0094
     50        .0031
     60        .0010
     75**************

SETTLING VELOCITY DISTRIBUTION

PGT
VELOC
100 >.
     .
     .
 90 >.
     .
     .
 80 >.
     .
     .
 70 >.
     .
     .
 60 >.+
     . ++
     .   +++
 50 >.      ++
     .        +++
     .           ++
 40 >.             ++
     .               +++
     .                  ++
 30 >.                    +++
     .                       ++
     .                         ++
 20 >.                           +++
     .                              ++
     .                                +++
 10 >.                                   ++
     .                                     +++
     .
  0 >.........................................
     .              .              .
    .001           .01            .1

               SETTLING VELOCITY(CM/SEC)
                    LOG SCALE
```

```
                SETTLING VELOCITY ANALYSIS

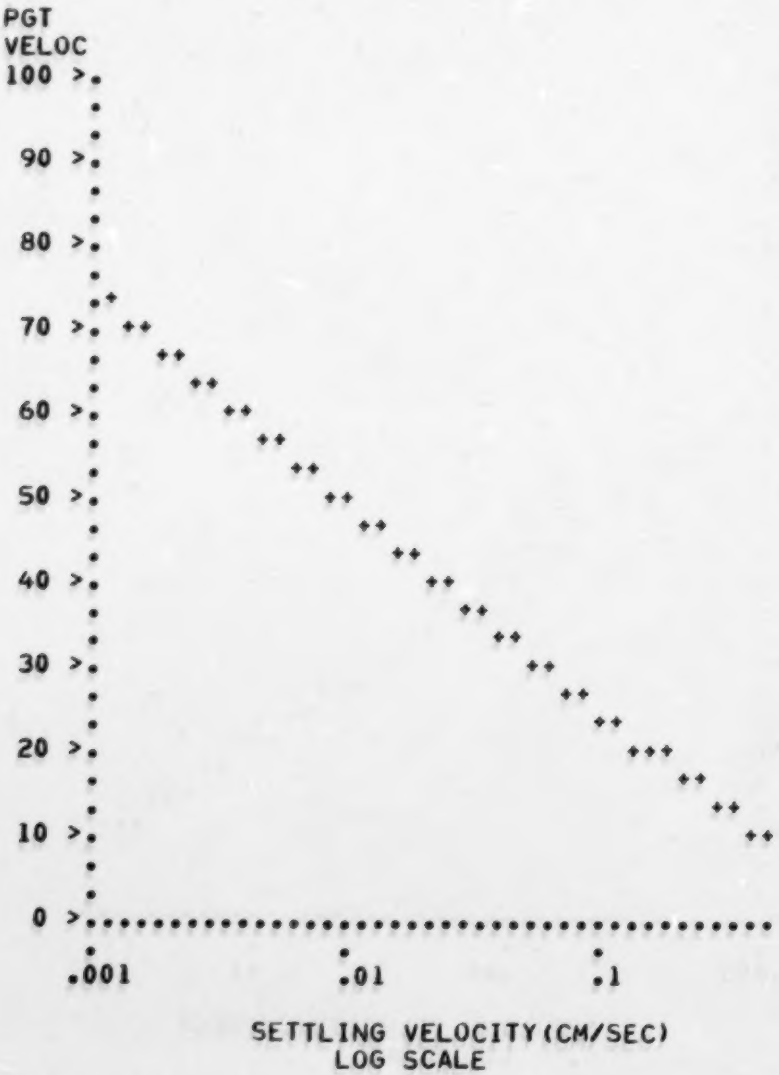
JS2  OWLS HEAD PLANT
TEST CODE: ST12  INIT. CONC.=180 MG/L

SETTLING VELOC. DISTRIBUTION EQUATION
     PGT =    -9.0538 +      8.0177 LNT +     .2536 LNTSQ

REGRESSION ANALYSIS DATA
     CORRELATION COEF. = .9846
     STANDARD ERROR =      4.69

SELECTED VALUES
 %TILE          VELOC
     25          .0939
     40          .0219
     50          .0088
     60          .0036
     75          .0010

SETTLING VELOCITY DISTRIBUTION
```



```
                 SETTLING VELOCITY ANALYSIS

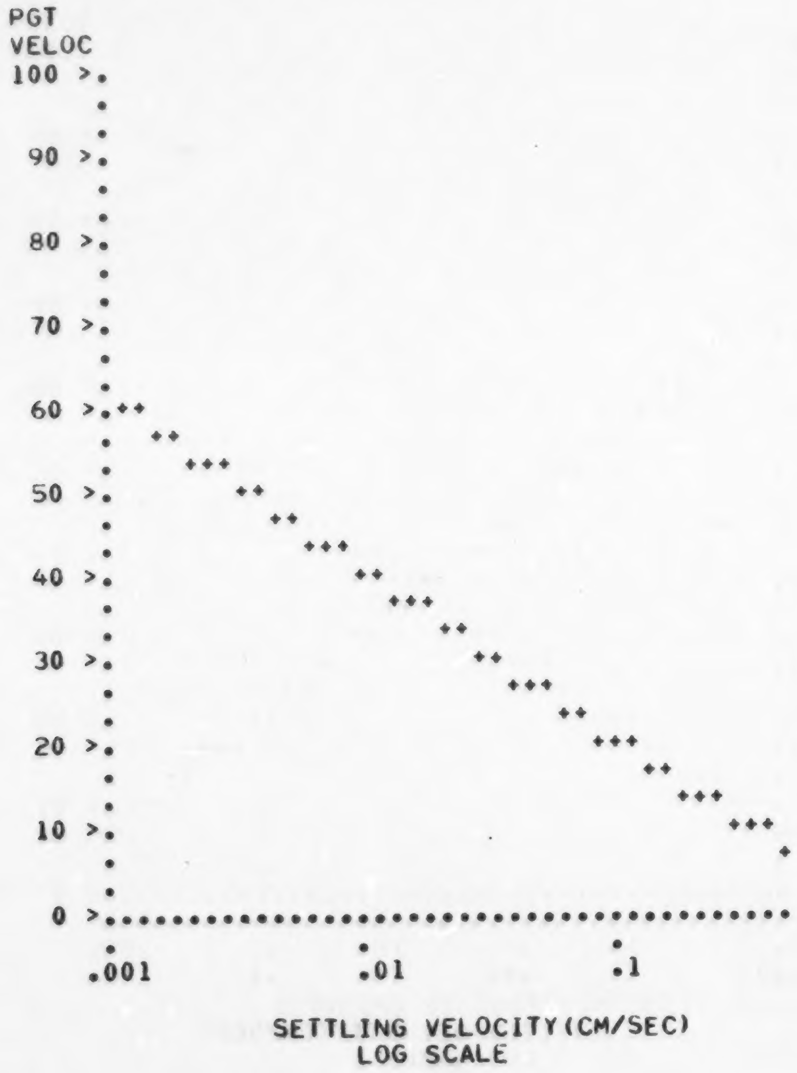
JS3 OWLS HEAD PLANT
TEST CODE:ST13    INIT. CONC.=150 MG/L

SETTLING VELOC. DISTRIBUTION EQUATION
     PGT =  -10.9245 +     7.9862 LNT +    .0940 LNTSQ

REGRESSION ANALYSIS DATA
     CORRELATION COEF. = .9933
     STANDARD ERROR =     2.04

SELECTED VALUES
 %TILE         VELOC
     25         .0575
     40         .0108
     50         .0036
     60         .0013
     75*************

SETTLING VELOCITY DISTRIBUTION
```



```
                     SETTLING VELOCITY ANALYSIS

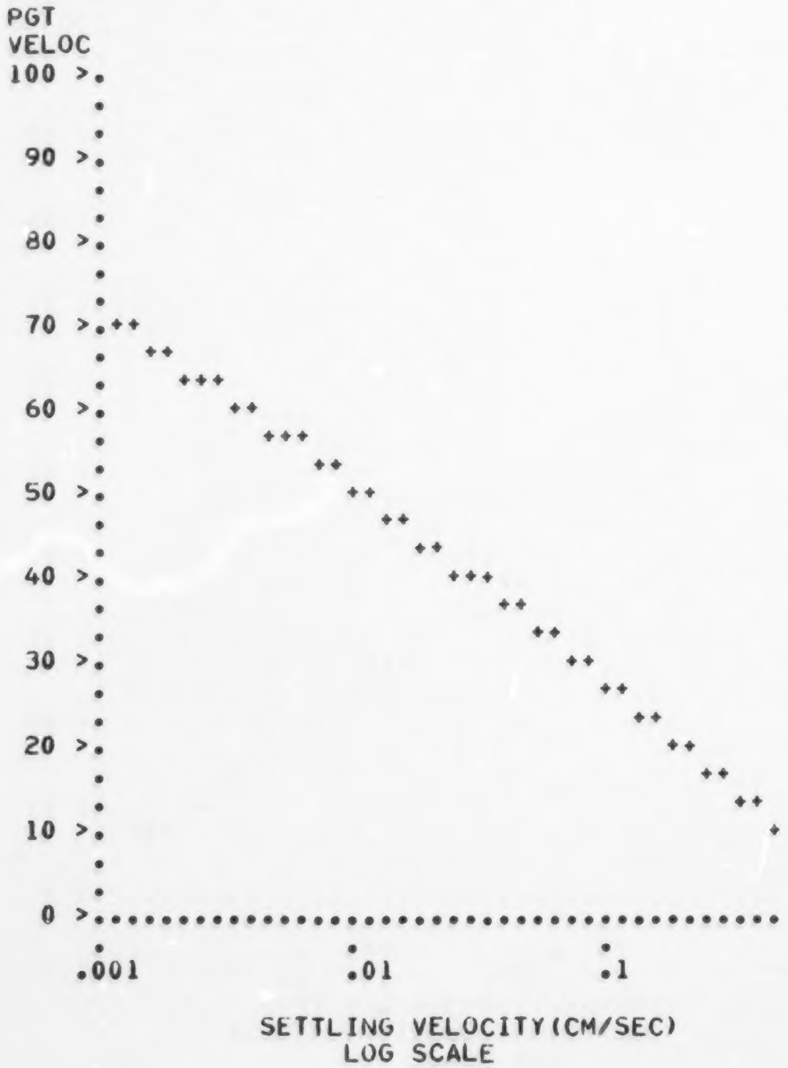
JS4  NEWTOWN CREEK PLANT
TEST CODE:ST14     INIT. CONC.=180 MG/L

SETTLING VELOC. DISTRIBUTION EQUATION
     PGT =  -15.7296 +     12.3591 LNT +  -0.2252 LNTSQ

REGRESSION ANALYSIS DATA
     CORRELATION COEF. = .9764
     STANDARD ERROR =     4.66

SELECTED VALUES
 %TILE          VELOC
     25          .1231
     40          .0293
     50          .0107
     60          .0037
     75          .0007

SETTLING VELOCITY DISTRIBUTION
```



```
                SETTLING VELOCITY ANALYSIS

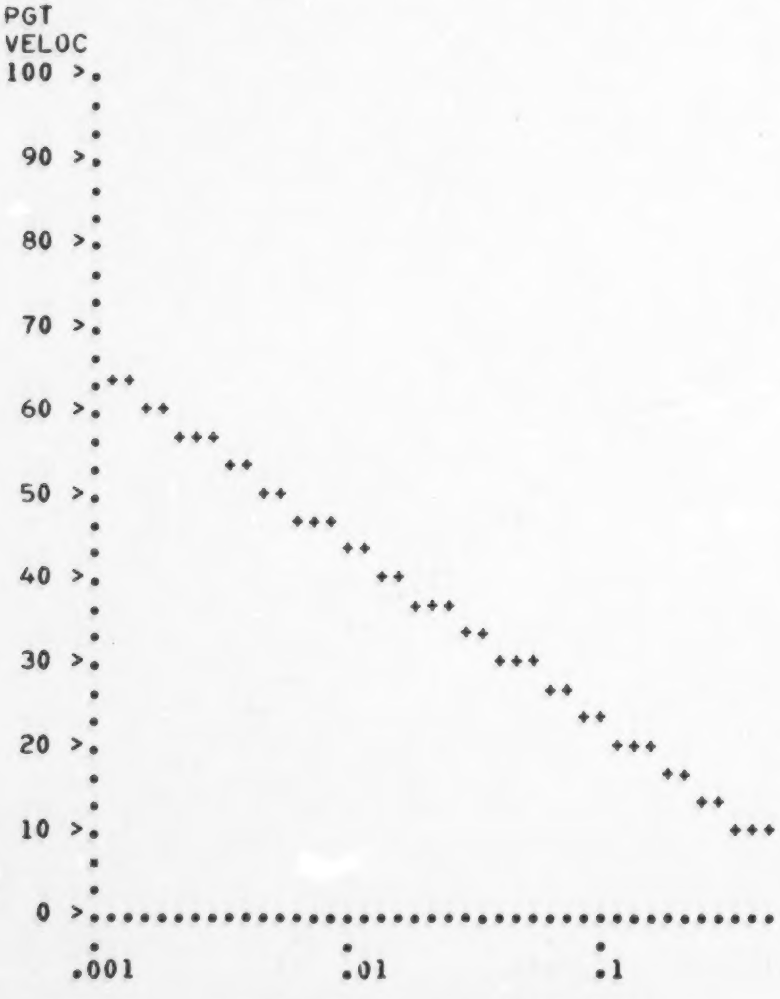
   OS1  : OWLS HEAD   10/14/75
  INIT. CONC. = 155.4 MG/L

SETTLING VELOC. DISTRIBUTION EQUATION
    PGT =  -11.1350 +     9.0145 LNT +     .0178 LNTSQ

REGRESSION ANALYSIS DATA
    CORRELATION COEF. = .9975
    STANDARD ERROR =     1.39

SELECTED VALUES
 %TILE          VELOC
    25          .0781
    40          .0152
    50          .0052
    60          .0018
    75          .0004

SETTLING VELOCITY DISTRIBUTION
```



```
                 SETTLING VELOCITY ANALYSIS

   OS2  : WARDS ISLAND  10/14/75
  INIT. CONC. = 68.6 MG/L

SETTLING VELOC. DISTRIBUTION EQUATION
     PGT =     2.4808 +    -1.7235 LNT +    .3927 LNTSQ

REGRESSION ANALYSIS DATA
     CORRELATION COEF. = .9587
     STANDARD ERROR =     1.59

SELECTED VALUES
 %TILE         VELOC
     25
     40
     50
     60
     75

SETTLING VELOCITY DISTRIBUTION

PGT
VELOC
100 >.
     .
     .
 90 >.
     .
     .
 80 >.
     .
     .
 70 >.
     .
     .
 60 >.
     .
     .
 50 >.
     .
     .
 40 >.
     .
     .
 30 >.
     .
     .
 20 >.
     .
     .+++++
 10 >.     ++++++
     .           +++++++
     .                  +++++++++++
  0 >..............................+++++++++++
     .              .              .
    .001           .01            .1

                SETTLING VELOCITY(CM/SEC)
                     LOG SCALE
                SETTLING VELOCITY ANALYSIS

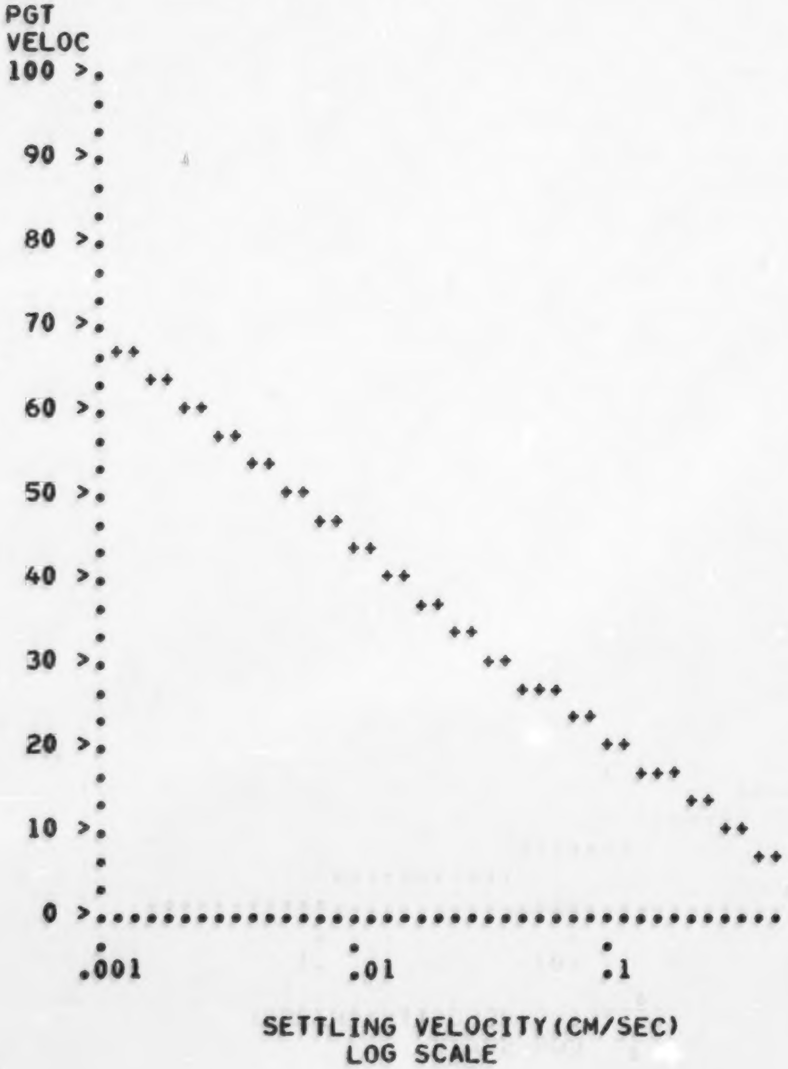
  0S3 : NEWTON CREEK  10/15/75
 INIT. CONC. = 202.2 MG/L

SETTLING VELOC. DISTRIBUTION EQUATION
     PGT =  -10.8555 +     7.4837 LNT +    .2584 LNTSQ

REGRESSION ANALYSIS DATA
     CORRELATION COEF. = .9977
     STANDARD ERROR =     1.39

SELECTED VALUES
 %TILE          VELOC
     25          .0634
     40          .0142
     50          .0056
     60          .0023
     75          .0006

SETTLING VELOCITY DISTRIBUTION
```



```
                SETTLING VELOCITY ANALYSIS

    OS4 : HUNTS POINT  10/16/75
   INIT. CONC. = 143.7 MG/L

 SETTLING VELOC. DISTRIBUTION EQUATION
      PGT =    -8.8932 +      6.2674 LNT +     .2420 LNTSQ

 REGRESSION ANALYSIS DATA
      CORRELATION COEF. = .9970
      STANDARD ERROR =      1.36

 SELECTED VALUES
  %TILE          VELOC
      25          .0422
      40          .0078
      50          .0027
      60          .0010
      75*************

 SETTLING VELOCITY DISTRIBUTION
```